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## ORIGINAL ARTICLES

### SOME REFLECTIONS CONCERNING THE STATUS OF THE MEDICAL PROFESSION.*

BY ROBT. H. GOODIER, M. D., HANNIBAL, MO.

Good judgment rationally and naturally rests its appraisement of merit in any ethical system of professional organization, upon the character and attainments of its duly accredited representatives, and the measure of good it accomplishes. The truth of this premise is nowhere more substantially correct or apparent than in the intelligent, public estimate of the profession of medicine. For this reason the physician should be a man of liberal education and strict moral integrity. As the apostle of good health and the high priest unto nature, he must have such knowledge of hygiene as will enable him to formulate sanitary rules and regulations that best conserve and protect normal vitalism in its physiological expressions. Moreover, as the exemplar and teacher of higher knowledge relating to the circumstance and mode of life, the physician must be faithful and loyal to the principles of a profession that has such vital interests in the individual units of society as well as the larger public welfare.

It is no less his duty to prevent disease than to contribute to its cure, when once expressed. Like the watchful sentinel, guarding the army's encampment from sudden surprise and assault of the enemy, the true physician stands over against the caravan march of life, with all its flushing hopes and ambitions, to discover the lurking ambushes of deadly infection, whose outbreak causes such desolation to the human family. He must necessarily be a student,—satisfied with nothing short of the fullest attainment of which he is capable. Where he cannot lead he must be able to follow by keeping in touch with the work of stronger and better endowed members of his profession. Standard medical works in his library, leading periodicals and journals which must be read and digested; together with local and state medical society affiliation, are auxiliaries of great strength and helpfulness to all who are willing to be

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informed, and no physician who hopes to succeed can afford to neglect these means of growth.

As well might the farmer expect last season's rains and sunshine to fructify the seed of harvest to-day as for a physician to practice his profession on a knowledge of medicine learned at college ten or twenty years ago. I would not decry this knowledge, for it is essential, but it must be worked over and added to all the while; like oil in the lamp, it must be replenished; or, as the manna of old, good for present use but must not be depended upon for future need. Besides, we owe it to society and especially to our own clientele, whose faith in us is sometimes so beautifully expressed, to keep pace with the advance of medical progress and bring to their aid all that it offers. Our ministry is to the sick and suffering of our race, in whatever circumstances or conditions we may be called to attend them, and no profession imposes more serious and sacred obligations upon its representatives than the profession of medicine. Our function is as broad as the ills of human life, and deep as the reach of our power to help.

On the whole, the mercenary spirit or hope of reward is less a motive with the true physician in the discharge of duty than with representative members in other professions. Aside from the church militant, the state has no higher interest than that represented in a scientific, moral, medical profession, and the intelligent, reputable physician is the state's best asset. More closely and vitally related to its supreme interest than any other human agency; more than the lawyer, who makes and interprets laws under which metes and bounds of social order are defined; more than the banker, who is the fiscal agent and commercial index of the state's prosperity; even more than the teacher, who educates and qualifies the embryo citizen in the duties of civic and moral responsibility. For what would all these interests be worth unless conserved and protected by the physician's knowledge and wisdom. A study of our profession shows its ministry faithful and in perfect accord with the best interests of the citizen and state. In this connection I might emphasize this truth, namely: That all rational, scientific medicine has its best expression and highest culmination in the old and original system of medicine as represented by the regular, or "Old School" as it is sometimes denominated. It is always the pioneer, blazing paths of noble conquest for the advance of human progress, and guardian of human destiny. Civilization measures its leaps and bounds under the guiding spirit of its best interpreters.

This pride and boast of our profession is on substantial grounds of evidence, and we are able to furnish proof that will not only refute but embarrass any counter challenge. All the scientific standards of medical progress have been raised by exponents of our profession; all the important discoveries that mark epochs in medical advance are the result of their study and research. We boast a long line of immortals,—heroes in strife and struggle for the good of others, who did their work well and left the world a legacy of good immeasurable, next only to that

vouchsafed by the Divine intercession in the plan of human redemption; and some stand close in faith and works to the great purposes of this oblation.

The Hall of Fame would not contain their names, and yet none have record there. But it is well. We would not entrust their names to such a perishable monument; for, like the Coliseum and Parthenon, it shall crumble into dust and be the habitation of owls and bats, but our great men shall live on while human hearts have affection and life has woes. It is well. Only another instance of the world's ingratitude to its chief benefactors. In eternity they shall have their reward; for like Abou-Ben Adhem they wrote their names within the Book as those who loved their fellow-man, and when the seal of the Book shall be opened, Lo! their names, like his, shall lead all the rest. Galen, Harvey, Jenner, Benjamin Rush, Beaumont, Simpson, Ephraim McDowell, Virchow, Marion Sims, Koch and Pasteur! What names are more illustrious, and who have done more for human need? All life to-day is debtor to the grace and love of their unselfish labors. Hosts of others might be named, who shine resplendent in the same noble galaxy, and whose influence is a sweet benediction to-day in the hearts and lives of millions who knew them not, and will be in the lives of millions yet unborn.

Among some of the many beacon lights of our professional ministry that have given the deepest benefactions of joy and peace to the human family, we may briefly mention the complete systemization of all anatomical organization and relation, as well as of physiological function. Upon the basis of these fundamental branches of our science rests all the success of medical progress, and they are distinctly the glory of the "Old School" exponents. Vaccination, anesthesia, the circulation of the blood, the process of gastric digestion, the cell genesis of life, the germ etiology of disease, anastomosis of arteries, antisepsis and asepsis, the isolation of the cholera, tubercular and plague germs. The stegomyia calopus has been disarmed of her deadly infection and yellow fever is no longer the dread and scourge of our southern neighbors. Antitoxin, the specific antidote to the deadly ravages of the Klebs-Loefler bacillus, has set a new star of promise over the nursery pledges of love. These and many other brilliant discoveries are the priceless heritages bequeathed to the human family by representatives of our profession. Again, to-day, one of the most notable and splendid achievements of modern engineering art is made possible only by the doctor's intervention. His contribution in measures of sanitary science is more essential to the successful completion of the great Panama Canal than government authority, and the millions of dollars appropriated for its execution. But here, however, as in many other instances, while the doctor is chief factor he is not the central figure. His unobtrusive presence is not in the lime light of this great exploitation, and history is not likely to give him the credit that is due him, albeit the government has given his services splendid recognition. Let a plague, or blighting pestilence, sweep over our country to-day, and representatives of our profession be inactive, or, if such an attitude on

their part could be conceived, refuse to meet the exigencies of the situation, what would be the result? It would be too sad to contemplate, and I will not raise the curtain upon what would be life's deepest, darkest tragedy. But how urgent would be the clamorous public outcry for the old "Regulars" to throw the protective aegis of their influence over against the deadly infection. In times of deepest human need, the public safety knows the bulwark of its best protection; society feels a security and confidence that lulls the panic fear in the presence of a plague-stricken danger when it knows the "Old Guard" is on duty.

But, gentlemen, what is the status of a profession so proud in achievement, one that has ever done its duty to society and the state in such beautiful benefactions of good? It is good you say. Yes, better than it has ever been in many respects. We have greater and better endowed men to-day than in any former period of our history, who are reflecting the zenith of its glory in brilliant discoveries and resolving mystery into knowledge. The rank and file of its ministry, also, have caught the spirit of inspiration and truth and are pressing on in paths of high and noble endeavor with the shibboleth of victory. But while this is true, its best exponents know and feel that there are conditions involving some serious handicaps that must be overcome before it can attain its fuller measure of promise. Down among the foot hills, or in the background, rises the smoke of unholy sacrifice from violated altars of our faith and ministry. Unprotected in our rightful sovereignty, we are made the scapegoat of all forms of semi-professionalism and apostasy. Gross ignorance and charlatanry in fake enterprises, and criminal alignment, are to-day the shame and menace of the noblest profession under heaven. I do not mean to imply that an ignorant member of our profession cannot be ethical and honest, but I do insist that anything less than a fair average preliminary qualification is not the proper foundation for the study and practice of medicine. Licentiates with such a positive handicap are precluded from legitimate competition with more capable members of the profession, and have the strongest incentives to fall into the lowest stratum of unprofessionalism. All frauds and charlatans, however, are not ignorant. Now and then, but infrequently, we find a representative with whom the passion of gain is stronger than the sense of moral rectitude, prostituting reputable attainments.

But from whatever class, the too often disreputable leech-craft of this cult does more to prejudice public favor against our ministry, and create an excuse for the fads and fallacies of occult empiricism, than all other agencies. Public caprice and credulity are too easily influenced by this class, and in the multiplicity of human ailments the brazen affrontery of graft challenges and confuses the afflicted at every turn, vaunting the most extraordinary methods of cure. People, not instructed in the ethics of our profession, readily give ear to the voice of the seducer and too often find they have committed themselves to the care of evil and designing mountebanks. Yet experience teaches them nothing, for they are hardly out of the toils of one deceit before they are ensnared by

another. Poor unfortunate victims, will follow up the rankest imposters and become their oracles until money and health are gone. Then the wasted, wrecked remains of such misguided lives become a care and burden on the charity of some honest, reputable physician who smooths out the penitent's path to the grave as best he can. Surely the sufferings and afflictions of our fellow-man are too sacred responsibilities for fraud and graft to capitalize upon, without our strongest protest. Petit larceny is punished by law and should be; but petit larceny, that steals its shift here and there, is a virtue compared with the dark graft that consorts with human confidence to rob its victims of both money and health. It ought, however, to be an object lesson of sufficient import to the citizen and state, to see that men of this class are not men who take rank in the profession. They are never prominent, except in public print, or in some piracy of human confidence. Such ilk are not even recognized by the better class of physicians, who give honor and dignity to the profession, and men upon whom society and the state depend when outbreaks or epidemics of disease, menace the public welfare. The reputable profession smarts and burns under this shameful abuse and prostitution of professional honor, but seems powerless to redress the grievous wrong. It cries out warning against the abominable treachery, but seems only to attract more favorable attention to the evil it would protest.

Quacks and charlatans are baneful anomalies, evolutions of violated faith on the part of a semi-professional class for sordid, mercenary interests. With a suave, bland, mannerism and too often a voluble ignorance, they beguile public confidence, and a noble profession must bear the sin and reproach of their machinations until it can purge itself of this shameful prostitution.

Gentlemen, in conclusion, let me say that the profession must take the initiative if it would rid its ministry of this baneful progeny. And it can be done by a determined, united action and the help of the state. The state does not, however, yet seem properly to appreciate its full measure of responsibility to a profession from which it expects and demands so much, and from which it has received such great benefactions. It is true the state has authorized and chartered colleges for the purpose of training and qualifying licentiates of medicine, and makes fairly liberal appropriations for the maintenance of state medical departments and boards of health. But the state must go further, and give legislative enactments that will enable the profession to safe-guard and protect its own interest as well as the public welfare, in the character and type of its representatives, and prevent the fake enterprise and graft of a large and increasing class of professional apostates. The state would readily give its aid to this end if legislators could understand the real merits of the situation. Let it be our duty to press this issue with the state until we obtain legislative redress for this baneful reproach.

Another means to this end is in reputable medical schools of uniform and accredited entrance requirements. The profession should insist that there shall be no evasion or compromise on the part of any school in the

enforcement of these requirements, for the sake of patronage or otherwise. This is not only due the profession and society at large, but simple justice to such colleges as zealously guard the portals of our profession, and whose primary interest is to qualify and develop the true physician and make him a credit to his Alma Mater. Standard, high grade schools are our pride and strength, and the profession should foster and encourage them by vigorously protesting against the existence of all low-grade or open-door institutions. Graduates from the former are, generally, an honor to our profession, and enter upon its ministry with the favor and grace of embodied opportunities and high, noble incentives. But unfortunately we seem to have another type of school, and might suppose, from certain extant evidence, that they exist for the purpose, mainly, of furnishing an incidental livelihood to the incorporators. Their diplomas, in too many instances, mean nothing more than matriculation certificates, or in other words, are better receipts for the discharge of pecuniary benefits to the school than as tokens of any merit or qualification in the student. Now and then a few students of reputable attainments come out of these schools, but if they had the proper appreciation for their interest they would not want to make such schools an Alma Mater. Thanks to our late legislature we now have specific legislation affecting the preliminary qualification of future matriculates in medicine, and no wiser legislation was enacted by the Forty-fourth General Assembly.

# THE ROENTGEN RAY IN THE DIAGNOSIS OF RENAL AND URETERAL CALCULI.*

BY R. D. CARMAN, M. D., OF ST. LOUIS, MO.

Year by year, the inadequacy of diagnosis based upon clinical symptoms alone, that is to say, the subjective symptoms of the patient and the signs elicited by ordinary means, becomes more and more apparent. Too much praise cannot be accorded those clinicians who, by combining careful observation, judicial ability, common sense and occasionally rare intuition, have made diagnostics a real science. The things which they have learned and taught will never become entirely obsolete; they will be modified, developed, elaborated and improved, but, constantly the demand both of faculty and laity, grows more insistent for increasing exactness. Probabilities become less tolerable, errors less excusable. The facts must be had, even though obtainable only by the most extraordinary methods, and every possible accessory is expected to be used. These remarks are especially pertinent to kidney stone, the diagnosis of which, in the past, has rested chiefly upon the following clinical symptomatology: 1. Attacks of renal colic characterized by intense pain, either in the back, or, more typically, in the flank of the affected side, radiating into the testicle and inner thigh. 2. Hematuria and other alteration in the urine, such as the presence of sediment and stones. 3. The signs and symptoms of complications, such as pyelitis; that is to say, chill, fever and pyuria.

Now, while these symptoms are present in many cases of kidney stone, it is inexact to speak of them, as does one textbook, as being "definite and characteristic," for it is also true of many cases that stone may be present without these symptoms; that these symptoms may be present without stone, and that the symptoms may be referred to the opposite side. Some of these facts have been admirably set forth by Charles Lester Leonard and others. In further corroboration I wish to call your attention to some of my cases hereinafter reported.

Boggs and many others, hold that the radiographer should also be a clinical diagnostician, and the writer cheerfully endorses this view. With his uncommon opportunities, the radiographer cannot fail to be interested in the symptomatology of these cases, and in everything of every sort that will aid in their diagnosis. The clinical examination of each patient should be comprehensive and thorough. But—and here I wish to speak with emphasis—the radiographer should not be unduly prejudiced by the information thus gained. The radiograph should stand upon its own bottom. It should be distinctly positive, or distinctly negative. A careful clinical examination plus a careless x ray examination

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becomes a doubtful quantity, and no amount of the former will make up for the latter.

*Value of the Method.* The value of the Roentgen rays in the diagnosis of renal calculi has been so clearly demonstrated that little is left to be said in this regard. Joseph F. Smith quotes Henry Morris as reporting 44 nephrectomies for stone, diagnosticated by clinical methods alone, where no stone was found. On the other hand, Kümmel and Rumpel report a series of 18 cases diagnosticated by the x ray, in all of which the stones were found and removed. A host of similar comparisons can be gleaned from the literature. Indeed, hostile criticism of late rather takes the form that a positive finding is valuable as confirmation, but that a negative finding is of doubtful significance. With a varying, and, as yet, incompletely developed technique, this view may have some justification, but with a further elaboration of methods it will undoubtedly be true, as Cole, Kümmel, Rumpel, and many others, already assert, that with a negative x ray finding, there is no stone present.

W. W. Keen remarks that it replaces an uncertain guess by a positive diagnosis, and its negative value is quite as great as its positive.

J. B. Herrick, editor of "Nothnagel's Practice" (diseases of the kidney), commenting upon Senator's rather mild advocacy of the x ray method says: "The value of the x ray in locating stones has passed beyond the experimental stage. The Roentgen rays will nearly always show a shadow when stone is present, and a failure with a stone present is likely to be due to an error in technique."

Bevan[1] holds that "a perfect skiagraph, with the proper amount of detail and differentiation is of greater value as a means of diagnosis than an exploratory operation. I am done with incomplete operations and operations done in the dark for kidney stones. A good skiagraph will show whether there is one or more stones. It will show which side the stone is on and exploration of the ureter can be omitted in an aseptic case when, from a clear x ray picture, we feel confident all stones have been removed."

Carl Beck[2] says that, contrary to the abundant proof of reliability of renal skiagraphy, text books hesitate to recommend, and even warn the practitioner against this method, because others have observed grave errors committed in its employment.

Whenever error has been committed, it was due to the individual and not to the method, and the latter should not be held responsible.

A definite diagnosis in suspected lithiasis can be made, *i. e.*, a renal calculus must invariably show, provided the calculus is there.

Fenwick[3] states that one of the most distressing of failures in urinary surgery is to cut into a kidney and mutilate it, perhaps irreparably, in order to find a stone which has long ago left that organ and traveled down the ureter; and yet this must happen at least in 22 per cent of all cases of renal stones if the x ray expert is not called upon to help in the diagnosis. "That the expert radiographer can guide the

urinary surgeon with a precision unattainable by any other means is without cavil, and I assert this on an experience of 500 operations upon the kidneys. In fact, I know of no obligation so great as that which the expert radiographer places the surgeon and patient under when he accurately defines a stone in the lower ureter."

Crawford[4] thinks that we are not justified in proceeding blindly in search of a stone, the location of which may be positively demonstrated by the use of this agency.

Holland[5] declares that with a competent x ray examination the operation becomes no longer, so as to speak, an exploratory one. The sufferer is encouraged to submit to operation much sooner, dangerous delay is thus avoided and the surgeon knows exactly what he is going to search for, the exact spot to incise, and, in many cases, exactly how many stones there are. He further remarks that if the x ray shows a small stone engaged in the ureter, with no symptoms of obstruction present, this knowledge would be of great value to the physician as evidence of the possibility of the passage of the stone, and repeated examinations might show the stone gradually passing from the ureter, or its presence in the bladder.

Leonard[6] remarks that the Roentgen method determines with absolute accuracy the presence or absence of all calculi in every case in which a satisfactory negative can be secured, if the negative is correctly read. "The Roentgen method of detecting or excluding calculi from the kidneys and ureters has proved itself to be absolutely accurate, when applied with the requisite technique. The errors which have been noted were all due to defective technique, or inexperience, in reading the negatives. The absolute negative, as well as the positive diagnosis of calculous disease is feasible. It depends solely upon the production of negatives having detailed shadows of tissues less opaque than the least opaque calculus; when such a negative is obtained and correctly read, no error can be made."

Kümmel[7] says: "Our experience has proved that every stone in the kidney becomes visible on a good x ray plate, if the proper technical precautions are observed, and that, on the other hand, if the plate fails to show a shadow, a stone is not present." And he speaks from an experience of 328 cases!

*Some Statistics.* Owing to the varying manner in which the case figures are furnished, I have found it impossible to tabulate them. However, the following are the more important statistical statements.

C. T. Holland[8] has examined 79 cases and in 22 stone or stones have been found. In 10 cases other shadows occurred, some easily differentiated from stone, others not.

A. B. Johnson[9] has examined 125 cases. In one of his earlier cases, a shadow upon the plate, due to a defect in the gelatin, was diagnosed as a stone. The patient was operated on and no calculus was

found. In 30 cases the positive diagnosis of stone was confirmed by operation. One negative error was due to the use of too short a plate.

F. H. Jacob[10] reports 9 cases. In 6 cases the stones were located and removed by operation. One negative case was lost sight of. In one case in which he failed to demonstrate a stone, but in which the severity of symptoms warranted an operation, a villous tumor of the pelvis of the kidney was found. In the other case, examination showed three small shadows in the left loin. Patient was operated on and three small calcareous glands were found in the mesentery. There was no kidney on the left side.

Max Reichmann[11] reports 64 cases; 23 gave positive results, confirmed by operation. In one case a diagnosis of pyonephritis in one kidney and nephrolithiasis in the other, was made. Operation confirmed the pyonephritis on the one side, but on the other only infected foci were discovered, without the presence of any concretion. Thirty-three cases were absolutely negative, so far as the Roentgen plates were concerned.

L. G. Cole[12] states that in 179 cases he has failed once to show a renal calculus when it was present. The failure was due to the plate not extending high enough to cover the kidney region. In two cases he made a diagnosis of stone when none was present.

Kümmel and Rumpel[13] report 18 cases diagnosed by the x ray, all of which were subsequently removed by operation.

Reid[14] examined 150 cases. Of these 63 were subsequently operated upon. A positive skiagraphic result was given in 36 cases, 25 in the kidney, 3 in the ureter and 8 in the bladder. Of the 25 renal cases, the stone was found by the surgeon in 23 cases and in one it was found post mortem. In one case it was missed, being merely a small collection of sandy material. Of the 3 ureteral cases, 2 were removed and the third passed subsequently. In the 8 vesical cases the stone was found and removed in 7 instances. A negative skiagraphic result was followed by operation in 12 renal cases and 15 vesical, and of these, a stone was found once in the kidney and once in the bladder.

Joseph F. Smith[15] states that in 27 cases of suspected kidney stone operated upon by Bevan, it was possible to make a positive diagnosis of calculus in 13 cases, a doubtful diagnosis in one case and a negative diagnosis in thirteen cases. In the doubtful case, operation revealed a single stone the size and shape of a pumpkin seed, lying well up under the last rib. More careful examination of the skiagraph in this case showed a rather vague shadow directly over the last rib. Dr. Smith states that the failure here was due more to an error of interpretation of the skiagraph than to the skiagraph itself. In the thirteen cases in which a negative diagnosis was made, the following conditions were found at operation: Tuberculosis, 5 cases; pyonephrosis, 2 cases; essential renal hemorrhage, 2 cases; cysto nephrosis, 1 case; hydronephrosis, 1 case; polycystic kidney, 1 case; hypernephroma, 1 case.

Leonard[16] reports 59 cases of suspected renal calculus examined with

the x ray. Of these 59 cases 12 had stones, either in the kidney or ureter; 8 of the cases were confirmed by the operation. One case later passed a ureteral calculus, two others had ureteral stone, but the age of the patient did not warrant operation, and one case of positive diagnosis refused operation.

Of the negative cases, seven were operated upon and the negative diagnosis confirmed in all except one, where faulty technique was responsible for not finding the stone, as the portion of the kidney containing the stone was not in the plate.

Kümmel[7] reports 328 cases, with 65 positive cases confirmed by operation, and makes no mention of any errors.

To the foregoing may be added the writer's 55 cases, reported herewith. In these there was technically one positive error, the stone being in the appendix and not in the ureter. No negative errors have thus far been demonstrated.

The above figures represent a total of 1093 cases with only 12 errors, an error percentage of about 1 per cent. This percentage is quite small, and covers a period of imperfect technique and inexperience. It can be justly claimed that the x ray diagnosis of renal stone is quite as reliable as the Widal reaction in typhoid, or the bacteriologic findings in diphtheria.

*Advantages of the Method.* 1. The examination is painless. No general or local anesthetic is required, with the resultant depression and subsequent treatment.

2. It requires very little time, and the dangers of burn are practically nil.

3. It gives the exact location of the stone or stones, whether in the kidney or ureter, and, most important of all, gives the number of stones present.

4. There is no exploratory operation necessary, as far as the detection of calculi are concerned.

5. Calculi bilaterally situated are recognized, and the danger of operating upon the wrong kidney or ureter thus obviated.

6. The negative diagnosis is as accurate as the positive, when proper care is taken.

*Technique.* The patient for x ray examination of the urinary tract, should be given a cathartic several hours before the examination. This is done to eliminate fecal concretions and to minimize the number of exposures.

At the time of exposure, all clothing is removed from the part to be examined and the patient may then be covered with a thin sheet if necessary.

The patient lies upon his back, with the shoulders elevated and the knees flexed, thus to bring the kidneys as close to the plate as possible. This is most conveniently done by the aid of pillows and sandbags.

Some form of compression is always used to limit the motion of the

Fig. I. No. 1. Calculi passed by Dr. G. No. 2. Calculus removed from kidney. No. 3. Calculus removed from left ureter. No. 4. Calculus removed from kidney. No. 5. Calculus removed from bladder. No. 6. Small uric acid calculi removed from ureter by the aid of the cystoscope. All these calculi were shown in skiagrams, except No. 6.

kidney, due to respiration. This is accomplished either by the abdominal binder, the compression diaphragm, or by instructing the patient to hold the breath. In the first examination two 11x14 plates are used. These plates carefully placed will give us pictures of the whole urinary tract. Following this examination, smaller plates are used with the compression diaphragm to more carefully examine smaller areas successively.

In this connection, I should like to say that the most valuable kidney plates are not usually beautiful as works of art, nor easily read by the inexperienced. They are not "photographs" of the kidney at all. They are records of relative density.

As more than half of the Roentgen technique depends upon the Crookes tube, it might be well to mention that the writer prefers a heavy self-regulating tube, neither too low nor too high in vacuum. The one I like best might be called by some a "seasoned tube." With such a tube, a good coil and a mercury turbine interrupter, we are able to get good tissue differentiation, and the exposure may vary from one to five minutes without change of vacuum, or danger to the patient.

The development is best done by the operator. Plates in which calculi are suspected should be developed with a rather dilute developer in order to increase the contrast between soft structures. This will necessarily prolong the time of development, but the results obtained are so satisfactory that the time is well spent.

The interpretation of the negative requires careful study and experience. I prefer to study the negatives in an illuminated box, looking at them from a distance with opera glasses, as suggested by Kümmel. Robert Abbe[17] remarks that to appreciate the meaning of skiagraphs requires as much experience as the technique of taking them. The most useful plates are often those which at first sight seem failures. A wet plate may show nothing, but when dry and held in proper light, may give good results.

In radiographic examination for stone errors are of two kinds:

Positive Errors. By a positive error we mean radiographic diagnosis of the stone when none is present. They are as follows:

1. *Phleboliths.* These are usually bilaterally situated; the shadows cast are usually more definite, sharply defined and are smaller than ureteral calculi. In a measure they can be excluded by a picture taken with the aid of the ureteral bougie, as suggested by Fenwick, of London.

2. *Foreign Bodies in the Appendix.* Dodd and Osgood[18] mention this possibility, and case 8, hereinafter reported, is an example. This error, however, can be eliminated by skiagraphing with the ureteral bougie *in situ.*

3. *Cheesy Deposits in the Calyces of the Kidney.* Also mentioned by Dodd and Osgood.[18] Presumably these would only be caused by tuberculosis, and a bacteriologic examination of the urine might be of service.

4. *Scybalae or Fecal Concretions.* These can usually be eliminated

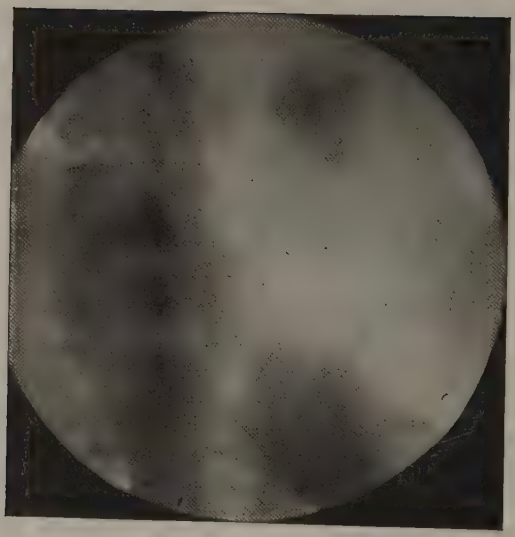

Fig. 2. Calculus in right kidney.

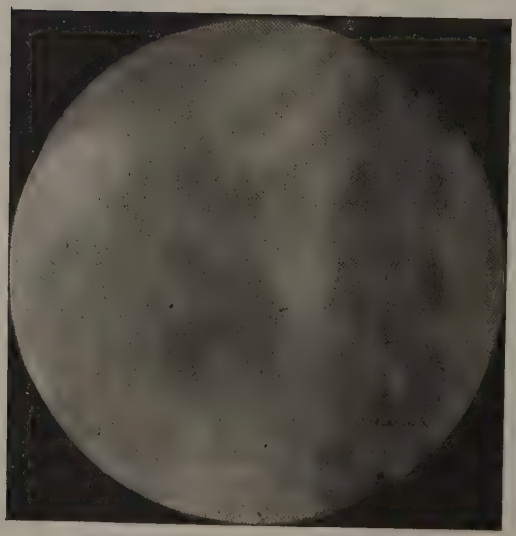

Fig. 3. Calculus in left kidney. Both Fig. 2 and Fig. 3 from the same patient.

by screen examination when they are displaced laterally by the peristaltic movements of the bowel, and by catharsis and a second examination.

5. *Small Bony Deposits in the Pelvic Ligaments.* Here again the bougie is of value.

6. *Calcified Lymph Glands Around the Lower Portion of the Ureter.* These also can be excluded by the ureteral bougie.

7. *Transverse Processes of the Vertebræ (Especially When the Outer End is Chalky) and Ossification in the Rib Cartilages as Mentioned by Albers-Schoenberg.* These can usually be eliminated by close inspection of the plate.

8. *Dense Masses of Fibrous Tissue as Mentioned by Riddle*[19] *Who Cites a Case in Which an Operation had been Done Leaving a Thick Scar, Which Cast a Shadow Similar to Stone.* The history of any previous operation along the area to be examined should be taken into account. Practically this source of error is unimportant.

9. *Defects in Plates.*

10. *Atheromatous Conditions.*

11. *Drugs in the Intestine—Bismuth*—(Baetjer).

NEGATIVE ERRORS. By a negative error we mean a failure to make a radiographic diagnosis when stone is present. Among the causes are:

1. *Obesity.* Obesity increases the difficulty of getting shadows, but, unless extreme, it is not insuperable. The compression diaphragm is of great value in these cases. Case No. 9 of this series weighed 200 pounds.

2. *Uric Acid Stones.* This is practically nil as pure uric acid stones are rare. Urinary calculi usually contain enough of the opaque salts to cast shadows.

3. *Defects in Plates.* Excluded by close examination of the plate and a second examination.

4. *Imperfect Technique.*

To sum up the sources of error, one can readily see that they are mainly in the individual and not in the method.

To date I have examined by the Roentgen method fifty-five cases of suspected renal stone. Shadows indicative of stone were found in twenty-five. Of these, ten have been operated upon and the stones removed. An eleventh case was also operated upon and the concretion discovered to be in the appendix.

Of the twenty-five cases in which the Roentgenograms showed stones, the shadows were in the kidney alone in seven; the shadows were in the ureter alone in fifteen, and in the kidney and ureter in two.

In none of the cases were both kidneys involved. Shadows were found in both ureters in four cases. In one case there was a stone in the right kidney and one in the right ureter. In another case there was a stone in the left kidney and one in the right ureter.

In ten cases the stone shadows were multiple.

In one case, confirmed by operation, the symptoms were referred

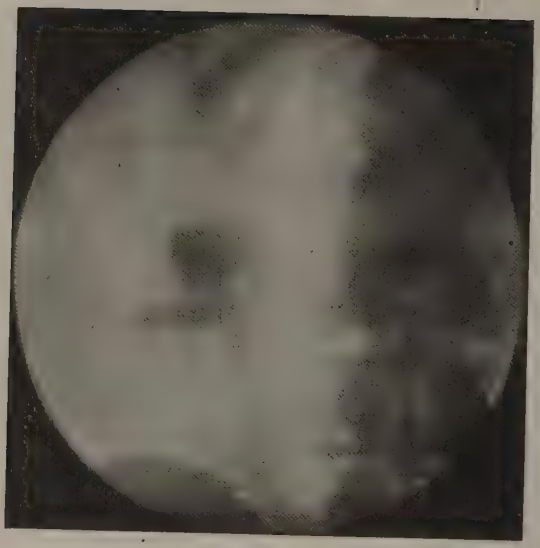

Fig. 4. Large calculus in left kidney.

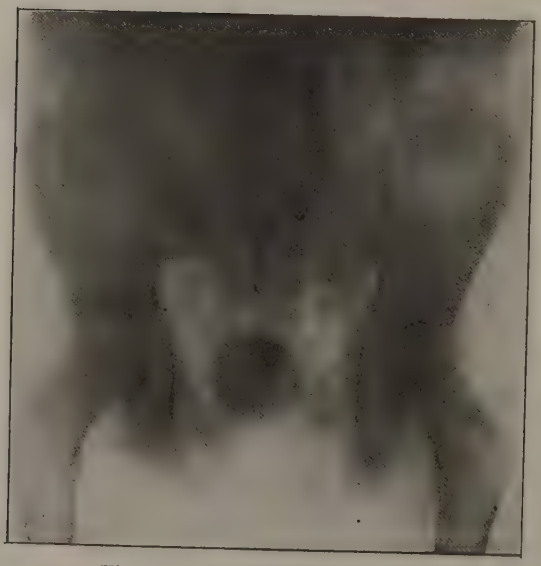

Fig. 5. Large calculus in bladder.

to the side opposite to the one affected. Another similar case has not yet been operated upon.

Of the fifty-five cases examined no stones were found in thirty. Four of these were operated upon and other conditions than stone discovered, so that in the thirty negative cases no error has yet been demonstrated. Some of the interesting ones are as follows:

*Case 1.* Mr. H., age 43, attorney. Referred by Dr. Bransford Lewis. Complained of pain in left lumbar region. Six years ago there was a passage of sandy particles in urine. January, 1905, first of a series of similar attacks, which usually began as a dull aching in left abdominal region. After an hour of such aching the pain became sharp, extending down the left side into the bladder and left testis. Patient has had four such attacks. Urine showed some red blood cells. In October, 1905, under chloroform anesthesia, ureteral catheterization was attempted. Obstruction was met on both sides about one inch up the ureter.

Skiagrams showed two shadows in left ureter region and one in the right. The shadow on the right side was not in the ureter, as shown by ureteral catheterization, while on the left side the catheter coiled up in the bladder after meeting obstruction with the stones.

*Case 2.* Mr. B., age 25, salesman. Referred by Dr. Hugo Summa. Patient has been operated upon for appendicitis; post-operative hernia following. Present illness began last March, with pain in left lumbar region, extending into the groin and accompanied with chills, fever and vomiting. Duration nearly three weeks. Second attack in November with pain in left side radiating into glans penis. No chills or fever with this attack. Vomited once. Urine negative.

Skiagrams: Shadow in left uterer region, intrapelvic. Fourteen days after skiagraphy, and five days after medical treatment by Dr. Summa, patient passed a stone.

*Case 3.* Mrs. X., referred by Dr. Jesse S. Myer. First seen three years ago when patient complained of a dull, aching pain in the left side. The patient later consulted a Chicago physician who catheterized the ureters and said the kidneys were normal. Recently patient had an acute attack of la grippe. During this time patient complained of acute pain in left side. Urine: Red blood cells and a few leucocytes.

Skiagrams showed three shadows in left kidney region.

Operation, March 28, 1907. Three stones were removed from the left kidney pelvis, one fully as large as a pigeon's egg, very irregular in outline, showing here and there the mulberry type. Two smaller stones, about the size of peas, more regular in shape and of the mulberry type. Patient convalescent.

*Case 4.* Mr. F., age 54, merchant. Referred by Dr. G. M. Phillips. This patient had had four attacks of abdominal colic in the last three years. The pain was quite severe, extending into the left groin. Pa-

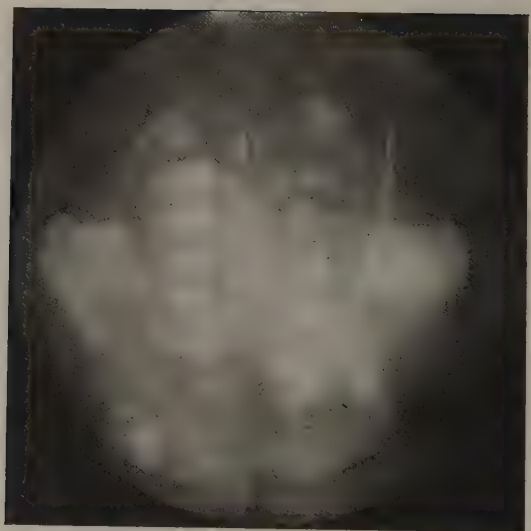

Fig. 6. Calculus in left ureter, about one inch from bladder.

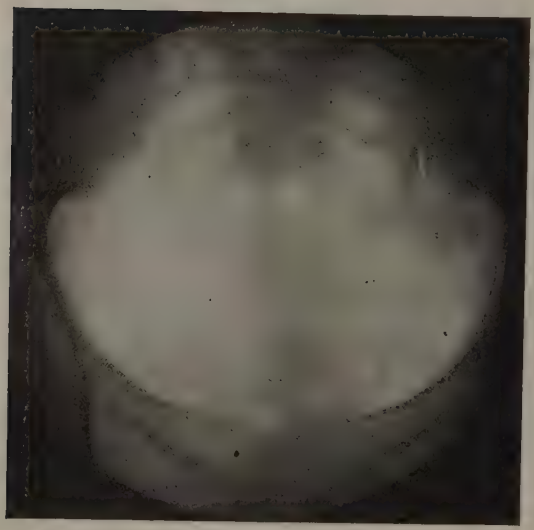

Fig. 7. Calculus in right ureter.

tient had chilly sensations, fever and some nausea, with each attack. Urine: acid, some red blood cells. No pus or albumin.

Skiagrams showed a shadow in left ureter region, intrapelvic.

Operation: Ureter was exposed retroperitoneally and on palpation a small mass was felt in the ureter within the pelvic cavity. The ureter was then followed as high as possible and nothing felt. Returning to where mass was found, nothing could be felt as before and ureter seemed clear. Dr. Phillips then washed the crumbled up stone from the bladder. This patient made a good recovery and has had no symptoms since.

*Case 5.* Mr. M., age 67, merchant. Referred by Dr. Jesse S. Myer, November 1, 1906. For about a year had had stomach trouble. In July began to notice pain which he located in the right lumbar and iliac region. The pain was deep, dull, aching in character and usually disappeared when the patient assumed a reclining posture. Urine: Acid, slight amount of albumin, very few red blood cells, numerous leucocytes, few casts.

Skiagrams showed a shadow in right kidney region and one in right ureter region, intrapelvic.

Operation February 15th, 1907. Kidney delivered, palpation of pelvis showed no stone. Incision through cortex revealed a mulberry stone, larger than a pea, which was removed. The ureter was then exposed retroperitoneally and a smooth stone about one half the size of a pea removed.

*Case 6.* Mr. F., age 45. Referred by Dr. Willard Bartlett. Abdominal trouble for five years. In June, 1902, appendix was removed with no relief of trouble. Patient still continued to have a dull, aching pain in the right abdomen, which was constant unless the patient was perfectly quiet. Some digestive trouble with occasional vomiting. Months of strict diet had not helped him, nor had rest and change of climate.

In April, 1906, skiagrams of the urinary tract gave a shadow in left ureter region, intrapelvic.

Operation April 25, 1906. A smooth round stone, about the size of a buckshot removed from the left ureter. May 8th, patient went home perfectly well and has had no symptoms since.

*Case 7.* Mr. H., aged 44, druggist. Referred by Dr. Willard Bartlett. Patient has had indefinite pain in abdomen for about three years. Fourteen months ago commenced to have attacks of abdominal colic in left side. These were exceedingly severe and were usually followed by blood in the urine.

Skiagrams showed a shadow in the left kidney and one in right ureter intrapelvic. Urine: Red blood cells and pus.

Operation October 27. Confirmed all shadows. November 10th, patient sitting up and ready to leave the hospital.

*Case 8.* Miss I., age 31, referred by Dr. M. G. Seelig, February 28, 1907. Present trouble began four months ago with pain in back and

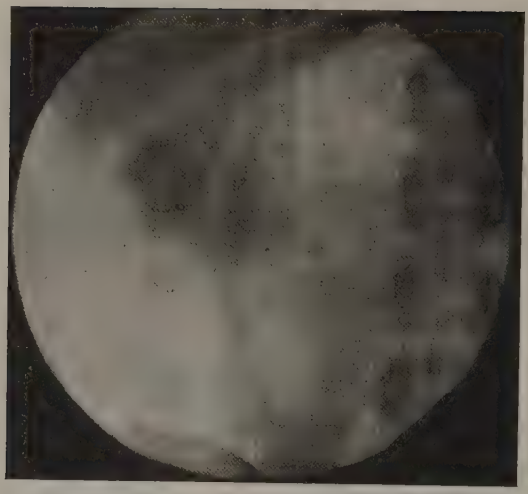

Fig. 8. Tuberculosis of left kidney, showing multiple phosphatic stones.

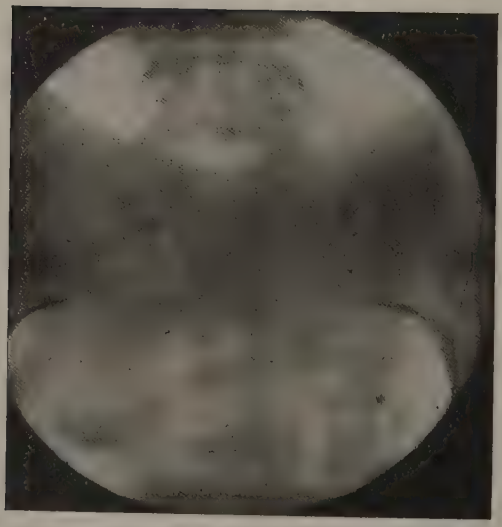

Fig. 9. Coprolith in the appendix simulating calculus in the ureter.

right lower abdominal quadrant. Patient noticed blood in the urine twice. A week ago had an acute attack resembling stone colic, patient fainting from pain. Cystoscopy showed normal ureteral orifices. Ureteral catheter entered left ureter and easily passed to kidney. In the right ureter progress of catheter was blocked about three inches from ureteral orifice. Urine: Negative.

Skiagrams showed a shadow in right ureter region intrapelvic. This observation was confirmed three times, the shadow, however, being two inches lower in the first plate than in all the others.

Operation: Extraperitoneal exposure of the ureter failed to locate ureteral stone. Small stone felt intraperitoneally which proved to be a coprolith in the appendix. The base of the appendix was adherent to the ureter. The coprolith consisted of a small organic seed as a nucleus with a mass of feces around it.

Skiagrams of this coprolith after removal gave a distinct shadow. Examination of patient after recovery showed an absence of the shadow.

*Case 9.* Mrs. B., age 41. Referred by Hugo Summa. Patient stout, weighing over 200. Abdomen thick and pendulous. For six months had had frequent attacks of pain in left side high up, radiating into gastric region, which led to a diagnosis of and treatment for stomach trouble by one of her physicians. Urine contained uric acid crystals; traces of albumin, discoverable only by Spiegler's test.

Skiagrams: After eight examinations a shadow was found in left ureter region, intrapelvic.

November 17, 1906, operation. Ureter was exposed retroperitoneally and a stone the size of a small bird-shot removed. December 5th patient went home to California and has had no symptoms since.

*Case 10.* Mr. R. Referred by Dr. Bransford Lewis. Trouble began five years ago with pain in left lumbar region, which was less severe in cold weather. This patient consulted six physicians and two osteopaths with no diagnosis or relief. Urine: Blood cells, calcium oxalate crystals. Cystoscopy and ureteral catheterization negative.

Skiagrams showed shadow in left kidney region.

Operation September 21, 1905. The stone was in renal pelvis, was about the size of a large pea, and had the color and appearance of a mulberry. Recovery uneventful and complete.

*Case 11.* Mr. H. P., age 43, salesman. January 20, 1907. Patient has complained of back for years. Two years ago had abdominal colic which lasted for about eighteen hours. Pain severe, requiring morphine. Chilly sensations and fever. No vomiting. In October, 1906, a second attack of abdominal colic, vomiting, no chills or fever; recovery in two weeks. Since this attack patient has been comparatively free from pain. Urine: Blood and calcium oxalate crystals.

Skiagrams of urinary tract show a shadow in left ureter region intrapelvic.

Dr. Lewis, with cystoscope in bladder, tried to pass a metal probe

up ureter to stone. The probe encountered a stricture at the ureteral opening so that efforts to pass it carried a loop of ureter up and to the inner side of stone.

*Case 12.* Mr. L. Referred by Dr. A. N. Curtis. Present trouble commenced eighteen months ago with sudden and severe pain in right lumbar region, extending into the groin and testicle. No chills, fever or vomiting. Six months later a second attack, less severe, lasting only a few hours. A month later was refused life insurance because of albumin in the urine. One month ago a third attack similar to the first. Urine: Albumin, red blood cells, pus and casts.

Skiagrams show a shadow in right kidney about the size of a hazel nut.

Operation: A single stone of the size indicated, rather rough, of the mulberry type, was removed from the kidney pelvis.

*Conclusions.* 1. The accurate diagnosis of kidney or ureteral stone is possible by the Roentgen ray only.

2. Clinical symptoms alone are insufficient to determine the presence or absence of kidney stone, their number, size or location.

3. Every suspected case of stone should be radiographed.

4. The radiographic examination should yield a definite result.

5. The interpretation of the plate is as important as the making of it.

6. The causes assigned for radiographic errors are, for the most part, not insuperable. There are few that cannot be overcome by improvement in technique, by perseverance and by experience.

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DISCUSSION.

Dr. Roberts, of Kansas City: I know nothing about the working of the electrical appliances, etc., but I was very much interested in the paper, owing to the fact that we have to call upon these men frequently

to help us make our diagnoses, yet I have met with quite a number of disappointments; but I am glad the doctor read his paper, and I wish that other men who are working along this line could have been present to hear it. It is merely another lesson in teaching us to be more careful in trying to make our diagnoses. I can see where some of the men who did this work for me have made mistakes and neglected some points the essayist brought out. I recall one case where I had a skiagraph taken. The history was that of stone. I cut down and found the ureter in good condition, except for some cicatricial tissue binding it down, and slightly dilated above obstruction. That was the reason I couldn't pass the ureteral catheter. I had made my diagnosis of stone after trying to pass the ureteral catheter, and finding a foreign body there. When we cut down to remove it, we found that it was a ball out of a 32 cartridge. It had been there for about four years. We did not get any history of this previous to the operation. The man received the wound and had never had the abdomen opened. He made a good recovery four years before that, and the ball was so close that the ureter had become involved by the cicatricial tissue that had tied it down. Although we were fooled as to the kind of stone it was, by removing it and loosening up the ureter all symptoms were relieved. Of course the patient had all the typical symptoms of a stone in the ureter.

I appreciate the paper very much, and I hope that this work will keep on as a means of helping us to make positive diagnoses, as that is the main thing in all our work.

Dr. Pearse, of Kansas City: The paper is one of those that has suffered from our section work. Such a paper would do a vast amount of good if it were heard by the gentlemen in the medical section, and to illustrate that, I wish to tell of an occurrence that happened to me about two months ago. A man came to me suffering with right-side pain and rigidity of muscles and a general assembly of symptoms that led to a diagnosis of appendicitis. This diagnosis had been made by two different surgeons, but his doctor, a medical man purely, was not satisfied because he insisted that his patient's pain, although located in the region of the appendix, always started under the ribs on the right side. In consequence of that, he kept on hunting until he landed his patient in the office of an x ray man, of his own accord, without the assistance of any surgeon. The x ray discovered to the practitioner and to his patient (and it was made known to the surgeons who had examined him) a ureteral stone lying about half way from the ureter to the bladder. An operation cured him, without showing any involvement of the appendix. In this case the medical man was the one who went to the x ray man, after two competent surgeons had passed the case up as one of appendicitis, on clinical symptoms alone.

# THE RELATION OF SALTS TO THE HEART BEAT.

BY W. W. DUKE, KANSAS CITY, MO.

Much interest has attended the investigation of the various chemical factors which maintain and modify the heart beat. The researches of Meronowicz and of Ringer first brought to light the fact that the heart is independent of the immediate supply of organic material and that it will continue to beat for hours if furnished with a suitable solution of salts of sodium, potassium and calcium. Such a solution, however, cannot be considered an ideal medium, since it gives the heart no chance to replenish its energy, used in contraction. That it furnishes the heart favorable conditions for utilizing the energy stored in its tissue, however, may be seen from the experiments of Locke, Kuliabko, and Hering.

Locke was able to keep the rabbit's heart beating continuously for 72 hours by supplying it with a slight modification of Ringer's solution. Both Kuliabko and Hering, by forcing Ringer's solution through the coronaries, have revived the human heart many hours after death (36 hours and 18 hours), and the latter, in a similar manner, resuscitated the beat of a monkey's heart which had been on ice for three days.

The precise parts played by each of the elements, sodium, potassium, and calcium, are probably as follows: Sodium chloride (.9% in Locke's), besides maintaining the proper osmotic tension of the solution, has a specific action on the heart muscle. It is a necessary element for the beat; that is, it cannot be replaced to a large extent by lithium, dextrose, etc. (Lingle, Loeb.) Potassium and calcium, though present in Locke's solution in bare traces (.025% to .05%), are of the greatest importance in maintaining and regulating the beat. Each is a necessary element for continued activity. They are antagonistic in their influence. Potassium promotes relaxation and diminished tone, calcium promotes contraction and increased tone (Howell). The heart beating on an artificial circulation of Ringer's solution can be stopped or slowed by increasing the potassium or decreasing the calcium in the solution.

The effect of excessive potassium is shown in Fig. 1. This inhibition was brought about by momentarily increasing the potassium from .025 to .08%. Fig. 2 shows the effect of passing a calcium free solution through the heart. A moment before this record was taken the heart was beating strongly on normal Ringer's solution and a few minutes later, when a calcium containing medium was again established, the normal beat returned. As a corollary to this it may be added, that a decrease in the potassium increases the rate and tone, and an increase in the calcium augments the tone and force of the beat.

The remarkable augmenting influence of calcium is shown in Fig. 3. This was produced by momentarily increasing the calcium in the circulating medium.

For a continued regular beat the amount of potassium and calcium

present must be delicately balanced, for if the percent of potassium is too low, the calcium present tends to bring about a rigor. Likewise, if the potassium is present in a physiological amount and the calcium is too high, a rigor eventually appears. Prof. Howell gives a most satisfactory discussion of the influences of these salts on the heart in *Jour. A. M. A.*, 1906, June 2-9, Vol. XLVI. No. 22-23.

Other factors which influence the normal beat are oxygen and hydroxyl-ions. Unless the heart can derive sufficient oxygen from the solution circulating through the coronaries it soon wears out. Alkalies are found to be the greatest cardiac stimulants. One cubic centimeter of a .1 per cent solution of sodium carbonate passed into the isolated heart produces an acceleration and augmentation of the beat which is remarkable. Figure 6 shows the result of an intravenous injection of sodium carbonate. Its use has been suggested in shock (Howell, Dawson).

Several observers (Botazzi, Howell, Martin) have mentioned the striking resemblance between the influence of potassium and calcium salts on the heart and that of the vagus and accelerator nerves. Fig. 1, produced by injecting a few cc. of .08 per cent potassium chloride into the coronaries of the isolated dog's heart, shows the curve of potassium inhibition. As soon as the excess of potassium was washed from the heart by the normal medium, the beat was immediately established. This inhibition apparently differs in no respect from vagus inhibition.

The curve of augmentation in Fig. 3 was produced by forcing a few cc. of .5 per cent of calcium chloride through the coronaries of an isolated heart. It shows the same increase in tone and in force of contraction that is seen in Fig. 4. The latter was produced by stimulating the accelerator nerve.

Recent researches of Prof. Howell, in some of which the writer assisted, throw some light on these points. It was shown by a delicate colorimetric analysis that the solution which issues from the coronaries after a long stimulation of the vagus nerve contains more potassium than the solution which flows out just previous to the stimulation. This excess of potassium was determined quantitatively and is thought to be sufficient in amount in itself to stop the heart. It seems, then, reasonable to say that stimulation of the vagus nerve causes a liberation of diffusible potassium salts into the heart muscle, probably by freeing it from some stable potassium compound there stored up, and that the potassium thus liberated is the inhibitory factor.

Some evidence was obtained to show that the augmentation of the heart beat following stimulation of the sympathetic nerve is due to the liberation of diffusible calcium salts into the muscle. This could not be tested as directly as was the liberation of potassium by the vagus, owing to the lack of delicacy of the method of analysis which was used in the determination of calcium. However, it was found that even under various experimental conditions curves of augmentation following an increase in the calcium salts of the circulating medium and those produced by

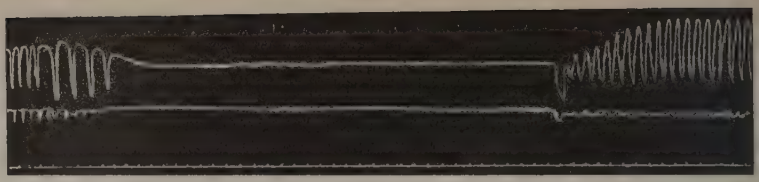

Fig. 1.—Potassium inhibition. The solution circulating through the heart contained NaCl. .9%, $CaCl_2$. .023%, KCl. .025%. The arrest was caused by momentarily increasing the KCl. to .08%.

Fig. 2.—The inhibition here was caused by passing through the heart a calcium free solution (NaCl. .9%, KCl. .025%, $CaCl_2$. .0.%). The beat was revived later by adding the physiologic amount of calcium chloride to the solution.

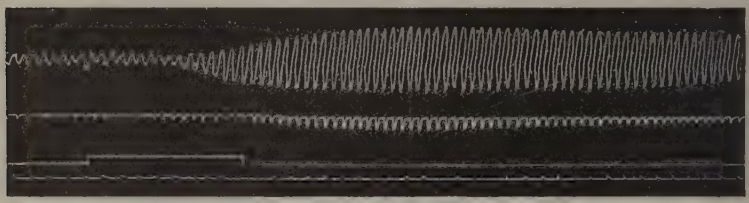

Fig. 3.—Calcium Augmentation. The circulation at first contained NaCl. .9%, $CaCl_2$. .023%, KCl. .025%. The augmentation was caused by momentarily increasing the calcium to between .1% and .5%.

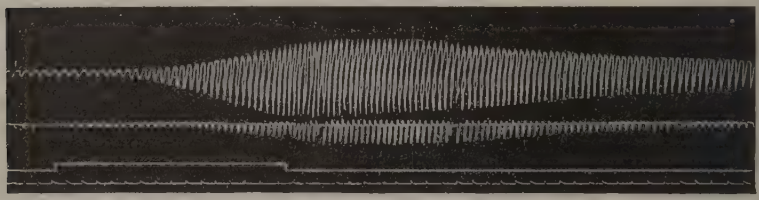

Fig. 4.—Sympathetic Acceleration. This curve of augmentation followed a stimulation of the accelerator nerve at the point indicated by the marking pen. Normal Locke's solution was circulated throughout.

Fig. 5.—The heart at the beginning of the record was in a state of potassium inhibition. The solution contained NaCl. .9%, $CaCl_2$. .023%, KCl. .075%. The return of the beat was caused by a strong stimulation of the accelerator. When the stimulus was cut off the heart was again inhibited by the excess of potassium.

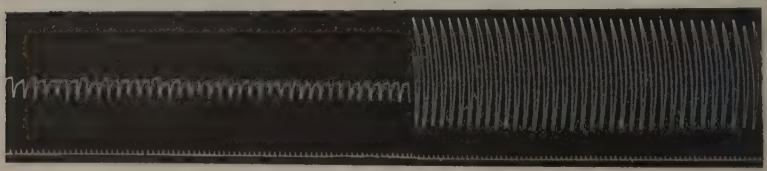

Fig. 6 shows the heart beat before and after an intravenous injection of sodium carbonate (Dawson). The effect is even more marked on the isolated heart.

stimulation of the accelerator nerve were strikingly alike. Fig. 5 shows, for instance, how the beat of the heart, in a state of potassium inhibition, can be brought about by stimulation of the accelerator nerve. The same can be accomplished by increasing the calcium salts in the medium. It may be possible, then, that stimulation of the sympathetic nerve dissociates some organic form of calcium stored in the heart, making it diffusible and that the calcium thus liberated results in augmentation of the beat.

If these statements are accepted, it is not so difficult to understand how the vagus nerve inhibits the heart while the accelerator nerve, carrying presumably the same nature of impulse and ending apparently in the same tissue, has the opposite effect. In the living animal both nerves are in tonic activity. The heart is, therefore, checked by the potassium of the blood and that liberated by the vagus nerve. It is presumably augmented by the calcium of the blood that which is liberated by the sympathetic nerve. The normal rate is the resultant of a delicate balance between these four important influences.

Calcium and potassium chloride given intra vitam do not exert the same influence as they do when given in an inorganic mixture to the isolated heart. The excess of these salts when injected in moderate amounts, is probably quickly absorbed by the tissues and, further, their physiological action is masked by the blood proteids. Records taken after the intravenous injection of moderate doses show only slight alterations in the beat. The effect is mainly on tone and is of short duration. (Cameron.)

The first five records were obtained from cats' hearts beating on an artificial circulation of Locke's solution established through the coronaries. The upper curve was taken by means of a recording tambour from the right ventricle. The lower one from the left auricle. The lowest line was made by the chronograph marking off intervals of one second. The one above it by the marking pen.

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# THE EFFECT OF SURGICAL OPERATION ON DIABETIC PATIENTS.*

BY LOUIS T. RIESMEYER, M. D., ST. LOUIS.

The very variable results that follow operations on diabetic patients suggest the desirability of a careful scientific systematization of the many factors that may play a rôle in such results. The difficulty of an effective systematization is very great indeed. As one illustration of this difficulty serves, the fact that in patients whose diabetes is of a very light nature, or where the glycosuria has disappeared for years without much attention as to diet, operative measures may bring about a rise from no sugar at all to a degree of glycosuria that may be appalling. True, this occurs only in very few cases, but it serves as one illustration of the difficulties in the way of a correct, scientific interpretation of the many factors that may play a rôle in the prognosis. Moreover, some of the slightest minor operations on diabetic patients have resulted in coma, followed by death within a few hours to several weeks after surgical intervention.

Even in cases where the general constitution of the patients seemed to guarantee a good result coma and death has followed an operation. And this not only in cases where there was a focus of inflammation at the site of operation; but also where such a focus was absent. On the other hand, in some relatively far advanced cases, patients have made good recoveries so far as the results of operative interference are concerned; and, what seems still more surprising, in such cases the patients improved as to their diabetic symptoms. The surgeon who operates on an ingrown toe nail of a diabetic under local anesthesia cannot be certain of a good result even as far as the life of the patient is concerned. Hence the wisdom of preferring palliative means in this instance as well as in all other minor inflammatory foci that will yield to non-operative measures. It is a dangerous thing to send a diabetic to a corn-doctor. In cases of cataract operations and iridectomies, where local anesthesia had been employed, patients have succumbed to coma within a few hours after the operation. We all have repeatedly seen the dire results following the extirpation of a carbuncle or of amputations done for the removal of a gangrenous part of an extremity. In other instances such procedures were followed by most happy results as regards the surgical affection as well as the diabetes.

With the present light upon the subject the cases that promise a good result cannot be foretold with any degree of scientific exactness. Hence the wisdom of giving a cautious prognosis in every case and in operating only in such cases where it is absolutely necessary and unavoidable. In this class of cases, however, an operation should be urged with the same firmness as where there is no diabetes. More than this.

*Read at the Fiftieth Annual Meeting of the Missouri State Medical Association, Jefferson City, May, 1907.

In diabetic patients any operation should be done at the earliest possible moment. No time should be wasted by preparing the patient for the ordeal. Worry and suspense weigh most heavily in the balance as regards life or death where diabetics are concerned; incomparably more so than in the case of non-diabetics. All not absolutely necessary preparations should be avoided. Physicking is ordinarily contraindicated, as it withdraws water from the tissues and weakens the resisting power of diabetic patients. Enemata should be avoided, if possible; they weaken a diabetic patient. Thirst predisposes to coma; so does hunger. Patients should not be starved longer than is absolutely necessary before an operation under general anesthesia. Withdrawal of food predisposes to coma by its weakening effect as well as by augmenting the percentage of acetone bodies in the blood.

General anesthesia, especially chloroform anesthesia, increases the danger of coma. Nevertheless, where ether is specifically contraindicated in non-diabetics, the same rule holds good in diabetics. Where there is permanent excretion of acetone bodies (oxybutyric acid, aceto-acetic acid, acetone) in a quantity corresponding to a daily excretion of four grams of ammonia, every general anesthesia is contraindicated; while in cases with an ammonia excretion of less than two grams, dietary measures are to be instituted (e. g., carbohydrates in some form) for the purpose of reducing the daily excretion of acetone bodies and thereby the danger of coma. The longer the narcosis, the greater will be the danger from coma, the general constitutional effects and the liability of an increase in the amount of sugar and acetone bodies in the urine.

Where inflammatory foci are to be dealt with, it may be advisable to diet the patient carefully by adequate withdrawal of carbohydrates; but by no means to an extent that the constitutional condition is weakened. With regard to this point there is much room for argument. To the internist the withdrawal of carbohydrates, for the purpose of increasing the tolerance for them, has no longer the significance as regards the risk of increasing the percentage of acetone bodies in the blood that it used to have before von Noorden pointed out the unnecessary fear of the increase of acetone bodies when carbohydrates are temporarily withheld. But the surgeon has to deal with an entirely different problem. If he withdraws carbohydrates from the diet of his patient, he removes entirely or partly, sugar—a splendid culture medium for the growth of bacteria; but his patient, escaping the scylla of infection, sepsis—coma from sepsis, may fall a prey to the charybdis of coma from acidosis due to an aggravated form of diabetes, aggravated by the operative procedure. The sugar that the surgeon has removed from the patient's blood by dieting, perchance "may" reappear as a result of operation, in enormously increased quantities. Close observation of a sufficient number of cases in point may clear up this mooted question. Besides by acidosis, coma may be produced in diabetics by septic infection, arteriosclerosis and the concomitant heart and kidney affections. The main factors, then, as regards the danger of operation as an exciting

cause of coma are: the weakening of the system due to preparations before the operation; the sensory irritation produced by the operation; bleeding, anesthesia, the resulting shock and the psychical effect before and after operation. All these factors, separately or combined, may bring about a change of metabolism that seals the patient's fate. The fact that in very slight operations, where a general anesthetic is administered, the patient may die from coma, would speak for the decided effect of the anesthetic upon metabolism; and the fact that a slight operation under local anesthesia, even in the absence of an inflammatory focus, results in some instances in coma and death in a few hours, speaks equally convincing for the decided irritation of the nervous system brought on by psychical excitement—an irritation that is liable to produce a rapid and decided change of metabolism.

The predisposing factors, as regards the effect of operation on diabetic patients, are: the constitution of the patient, the amount of neurasthenia, general weakness, fear, loss of alkaline salts of the tissues and the resulting impoverished nutrition, especially of the nervous system, acidosis, glycosuria, arteriosclerosis, heart and kidney affections.

In order to overcome the difficulties presented by operative measures, the time required for operating should be reduced to a minimum by avoiding all not absolutely necessary procedures.

After what has been said, the handling of the two classes of operative cases in diabetics, the affections resulting from the diabetes and those complicating the disease, almost suggests itself.

In gangrene, wait for line of demarcation before amputating at this line, in order to make sure that the circulation is sufficient to ensure vitality of the tissues. Exceptions to this rule are, progressive phlegmonous processes, lymphangitis, danger of sepsis. In selecting the site for amputation, two postulates are to be met. There must be no suspicion of the presence of bacteria in the tissues, and the circulation must be sufficiently active.

Inflammatory and gangrenous processes are most to be feared Furuncles should not be incised. If they do not heal by mere cleanliness and mild antiseptic applications, they should be extirpated, operating in healthy tissue. Carbuncles, too, should be excised. In all cases where one may operate without fear of bacterial invasion of the operative field, a radical operation is, *ceteris paribus,* indicated, if the constitution of the patient permits the procedure. For instance, in rectal carcinoma, on account of the danger of infection, do not extirpate but make an anus praeternaturalis. In carcinoma of other parts of the digestive tract extirpation should be done. For the sake of brevity, these two examples may suffice as an illustration. Individualization will readily suggest in other cases, what course it is best to pursue. A very good suggestion is the use of the thermocautery instead of the knife, whenever this be feasible. The thermocautery especially is indicated in cases of arteriosclerosis in order to prevent hemorrhagic foci with subsequent gangrene.

Sutures may have to be omitted entirely, or, at least, reduced to a minimum, whereby time is saved and gangrene avoided.

In case of acidemia large doses of bicarbonate of sodium in levulose lemonade should be administered with adequate restriction before and after operation—as much as three ounces of the alkali *per diem* have been recommended. According to Naunyn, such alkaline treatment prevents coma by increasing the reduced alkalinity of the blood. Von Noorden claims that, while alkalies will postpone the onset of coma, this feared condition will eventually supervene in spite of the alkaline treatment. Rest in bed is objectionable in diabetics, except in case of coma. The patients should get up out of bed as soon as feasible after operation. Nutrient enemata and food per os should be given as soon as the condition of the patient permits. As a rule, milk is the most appropriate diet after operation.

Thus the prognostic significance of operations on diabetic patients may be somewhat modified by sustaining the nutrition, the strength, resisting power of the body, preventing, counteracting acidemia and reducing infection and duration of operative procedures to a minimum.

2838 Lafayette avenue.

# PERITONEAL TUBERCULOSIS.*

BY JOHN D. SEBA, M. D., BLAND, MO.

Primary peritoneal tuberculosis, like tuberculosis of any other part of the body, is due to the tubercular bacilli. The mode of infection differs somewhat from tuberculous infection of other parts of the body. In pulmonary tuberculosis, the infection generally occurs by the bacilli being inhaled, whilst in peritoneal tuberculosis it is generally conceded the bacilli enter the body with the ingested food or food stuffs, principally milk.

It is not the aim of the essayist to give any striking new theories, but rather elaborate on those already well known pathological conditions as they exist. Contrary to the general opinion that peritoneal tuberculosis is always associated with peritonitis, I believe that post-mortems will prove the contrary; at least those cases upon which the author has performed post-mortem examinations have lacked all the elements of peritoneal inflammation, such as heat, pain, redness, hypertrophy or swelling. The perietal peritoneum, mesentery, and viscera, all looked pale and bloodless, and studded all over with miliary tubercles. They are found throughout the whole peritoneal cavity; they are in the coats of the intestines, in the mesentery, perietal peritoneum, in the walls of the stomach, the liver and spleen, the liver very often is much enlarged, reaching down to the umbilicus and even in the left side over the spleen. Morbid adhesion between the liver and stomach very often takes place, with poliferation in the walls of the stomach; when this takes place we are apt to have bleeding from the liver into the stomach, the blood being vomited, very often leading to an erroneous diagnosis of cancer of the stomach. The author has known a case where as much as a half gallon of blood was vomited at a time.

There is no doubt in the mind of the author that primary peritoneal tuberculosis has its most common cause in the use of tuberculous milk; it is of course possible that the infection could occur by partaking other articles of food infected with the tubercle bacilli, but I believe it to be the exception rather than the rule.

A vast majority of the cases that come under observation are infants, but older persons are not exempt from the disease.

The diagnosis of peritoneal tuberculosis is very difficult during its incipiency, and even after the disease has progressed to where nearly all hope of a cure has been abandoned, the diagnosis is very often in doubt. In fact a post-mortem is necessary to confirm a suspicion of the disease. As a rule whenever the attending physician encounters a chronic bowel trouble, with obscure and ill-defined symptoms, it behooves him to make extraordinary efforts to ascertain the nature of the trouble.

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*Read by title at the Fiftieth Annual Meeting, Jefferson City, May, 1907.

With this end in view it is well to have the milk on which the baby is fed examined with the microscope for the tubercle bacilli. If it is found, this at once clears up the diagnosis, for no intelligent physician at this day would doubt that a baby that is persistently fed on tuberculous milk will be infected with tuberculosis. It has been within the last few years, or since I began to hold post-mortems upon my obscure cases, that I realized the real situation, and found that peritoneal tuberculosis was more extensively distributed than is supposed by the average physician.

The symptoms of peritoneal tuberculosis are hard to define, are not very characteristic, and it is only by considerable experience and close observation, that the disease can be diagnosed. The microscope will clear up the matter if the tubercle is detected in the milk on which the baby is fed, or in the nursing mother's milk. Outside of this there is nothing characteristic that would give a positive diagnosis, the tubercle bacilli in the peritoneal cavity are not subject to microscopical examination; the stools very seldom contain the bacilli, the temperature as a rule does not run very high, only occasionally it runs up to 101 or 102; the bowels are generally constipated, requiring castor oil to get a daily action; the stools are as a rule very slimy, most of the time greenish, with exfoliation of the intestines. The liver as a rule begins to enlarge; the margin of it can be felt an inch or two below the margin of the ribs, and its advancement is towards the left; in older people the diagnosis of cancer of the stomach is generally made, and unless there is a post-mortem the error is never discovered.

As to the treatment it is entirely symptomatic, and palliative; no treatment known is of avail to stay the ravages of peritoneal tuberculosis; slowly the disease progresses to a fatal termination.

Our efforts should be in the way of prophylaxis. All milk fed to babies should be examined for tubercle bacilli, and if found the animal giving such milk should be condemned to death and killed. Where a mother or nurse gives tuberculous milk, she should not be permitted to nurse a baby.

With your permission I will report a few cases briefly.

Eva F., infant, was suffering from chronic bowel trouble; temperature, 99, sometimes above and sometimes a little below; constipated, with greenish, slimy stools; child profoundly anemic; some edema of hands and feet, the edematous tissue looking somewhat glistening; there was occasional trismus or slight spasms. Diagnosis, gastro-intestinal enteritis. Death was due to exhaustion. The post-mortem disclosed a very extensive tuberculous peritoneum, the tissues were not red, but on the contrary were very pale, and the whole peritoneum both visceral as well as parietal, was studded with miliary tubercle. This baby was being nursed by its mother. The mother's milk and sputum was examined and the tubercle bacilli were found. This was the first intimation that the mother was tuberculous.

C. S., aged 47 years, began to fail in health, became pale and anemic. He complained mostly of stomach trouble, claimed he could not digest his food, which would sour and ferment, with occasional vomiting. Palpation over the region of the stomach revealed a mass over the pylorus, which gradually extended all over the stomach; vomiting of blood was very frequent and at times he would vomit as much as one-half gallon of blood. The mass in front of the stomach was mistaken for enlargement of his stomach and the vomiting of blood was mistaken for hemorrhages from the walls of the stomach. He died from exhaustion and anemia. The post mortem revealed that he was suffering from extensive peritoneal tuberculosis; the liver, spleen, omentum and mesentery were studded with miliary tubercles. There were morbid adhesions between the liver and the walls of the stomach and the hemorrhages, taken as hemorrhages from a cancerous stomach, were in reality hemorrhages from the liver into the stomach, due to tuberculosis of that organ. In this connection it is well to bear in mind that with tuberculosis we very often have hemorrhages, and these hemorrhages need not necessarily be from the lungs. I will further state that in this particular case there were no symptoms that lead us to suspect pulmonary phthisis, and the post-mortem did not reveal any affection of the lungs. We could not positively ascertain the source of infection, but we believed that it was from the drinking of tubercular cow's milk.

In conclusion, permit me to say, be slow in making a diagnosis in your obscure cases, but use all means to ascertain the cause of the disease. Whenever a correct diagnosis is established, then go after it with all the power and enthusiasm at your command.

# LET US GET CLOSER TO THE PEOPLE.*

BY T. L. BRADLEY, M. D., OF WARRENSBURG, MO.

The majority of the members of the profession, in the writer's opinion, are guided by the code of ethics, but the question is raised as to whether the code in its present form is adapted to the many phases of professional life, or should the code be changed to suit present conditions. The author believes some changes could be made and particularly in one respect, namely, to enable the profession to come into more intimate relationship with the people.

Much has been said in favor of a more general dissemination of information on medical topics, but very little has really been accomplished in this direction by the organized medical profession. As a rule the knowledge which reaches the public concerning the care of the sick, comes through articles written in newspapers. These are generally garbled accounts of the subject discussed, inaccurate and unreliable, or prepared for the purpose of exploiting some pet theory not founded upon established scientific facts. The public forms its own opinions from such accounts, being unable to distinguish between the true and the false in these matters, and the profession then finds itself placed in the position of being compelled to combat the wrong impressions made upon the minds of the people, and the prejudices that invariably follow. The author quotes the words of Dr. Wm. J. Mayo who said: "That the people are ignorant of medical affairs is due to bad education rather than prejudice. They are more than two decades behind advanced medical thought. It is our duty to keep them better informed. We have permitted the public to be educated by patent medicine advertisements and the voluble charlatanism of the commercially interested. The time has come for the public to be taken into our confidence; if we wish better results we must enlighten the people." Dr. Bradley then suggests that every local society should be a bureau of information on all matters in which the public should be instructed, and that this information should emanate from the society as a body, never from individual members. Articles in the local newspapers and frequent public meetings would be profitable for both the public and the profession.

*Abstract of paper read by title at the Fiftieth Annual Meeting, Jefferson City, May, 1907.

# Journal
# Missouri State Medical Association.

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ADDRESS ALL COMMUNICATIONS TO METROPOLITAN BUILDING, ST. LOUIS, MO.

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E. J. GOODWIN, M. D., Editor.

PUBLICATION COMMITTEE:

Walter B. Dorsett, Chairman. M. B. Clopton, M. C. Shelton.


## EDITORIAL

### "PROFESSIONAL JEALOUSY."

Professional jealousy is the cry that was raised by an advertising healer, arrested in St. Louis recently by the Federal authorities upon the charge of misusing the mails, and an evening newspaper, commenting editorially upon the action of the Government in this case, suggests that it is the result of personal animosity,—presumably of physicians.

Ordinarily the blatant cry of an unmasked conjurer and the backhanded slap of an evening paper might be allowed to pass without notice, but we cannot let slip the opportunity to descant upon a phase of this question, generally lost sight of by non-medical persons. Let us remark at the outset that there never has been, never will be, and never can be an iota of jealousy on the part of any true physician toward the advertising doctor. One is in *business*—for the money there is in it; the other makes the practice of medicine his profession,—of which, further on, we shall have more to say.

The methods adopted by this person to inveigle the unwary to place themselves under his charge, differed from the customary procedures followed by the ordinary advertising doctor only in degree. The end result sought for is the same in all cases, and that is, a large and rapid inflow of lucre,—the more rapid the flow (inwardly) and the larger the amount thus garnered, the more successful does he who indulges in this sort of practice account himself.

Truly if success ever can be measured alone by the number of dollars amassed in a business pursuit, it is in this business of the advertising doctor. The successful merchant is proud of having marketed goods that were worth all that he received for them, the honest mechanic gives full time for money paid him, the laborer in the streets expects and receives only the amount that he earns, but who shall say what the advertising doctor—the doctor who is in the practice of medicine as a business and not as a profession—who shall say what he gives for the money he receives? And why do we feel thus toward the advertising doctor? Because we know how helplessly, how childishly, simple and dependent people are when they are sick, particularly poor people; and because we know that the great majority of advertising doctors strip the poor deluded persons of the last dollar that can be wrung from their lean pockets, and having thus relieved them—not of the ills that afflict their flesh—turn them adrift to become, perhaps, a public charge, if they are incurable, or to get well under the charitable care of a scientific physician, if curable.

The distinction between the practice of medicine as a profession and the practice of medicine as a business is this—that he who makes the practice of medicine his profession voluntarily and consciously consecrates himself to the uplift of mankind, physically, mentally and morally, with or without monetary recompense as the circumstances permit; while he who enters the field of medicine for the purpose of amassing riches degrades the noble art to a business level and ceases to be of the profession; he becomes at once a business man. The path of the true physician is illumined by the glow of happiness that suffuses countenances once distorted with anguish; the shimmer of gold is the guiding light of the business doctor. And whether in business, trade or profession, he who loves gold better than he loves truth will surely transgress the law of God, though he may escape the meshes of the law of man.

Again, the advertising doctor is not a progressive physician, although as a rule he proclaims himself better informed in the science of medicine than any other person in the community. A single example will suffice to make this clear. Not long ago an intelligent, skilled mechanic asked our opinion of the advisability of permitting a certain advertising doctor to cut out some polyps from his nose. Immediately there arose in our mind the question, how do you know that you have polyps? He did not know, but the advertising doctor said he had. He was advised to consult a physician of known reliability and learning, which he did and it was found that his affliction was something quite different from polyps and required altogether different treatment. This was not a case of error in diagnosis; it was pure ignorance, plus greed and avarice.

And so we say again, there is no such thing as professional jealousy between the advertising doctor and the true doctor of medicine. If physicians were not what they are (and here we speak only of those who have a true concept of the high calling which they follow), if the great body of the medical profession were not the self-sacrificing servants of humanity that they are, if they loved gold better than they loved truth, if they labored more for self and less for the benefit of their fellow men, they would have no better friend than the advertising doctor, for the patrons of the latter come finally to the care of the former, and usually in a more desperate condition than at the beginning, entailing longer attention and the expenditure of a greater amount of money. The people of this country do not know, perhaps they can never know in the sense of being conscious of their debt, the magnitude of the service freely given by the medical profession to lift them out of and beyond the realm where cankerous disease tortures the flesh.

The pity of it all is that the proprietors and editors of most of our great daily papers are not ignorant of these facts and, generally speaking, they share our abhorrence of this class of arrogant braggarts. Yet the newspapers prolong the sufferings of many innocent souls by nurturing the advertising doctor.

Will the public and the press ever learn that the true physician immolates himself on the altar of the public weal?

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## UNSANITARY RAILROAD CARS.

Are head-end collisions and thrown switches more fatal to human life than plush seats and sputum-stained carpets? The fatality of one has its carefully kept records, the other is lost in obscurity and is engraven only on broken hearts. Death is death, it does not matter whether it be in the midst of a railroad wreck or the throes of tuberculosis contracted in a Pullman car.

The unsanitary condition of railroad cars as a factor in the spread of disease is a serious feature of travel, yet the railroad companies have hitherto failed to apply those safeguards which the enlightened sanitary science of to-day clearly shows are effectual and unfailing. From smoker to sleeper disease rides in every car. Persons afflicted with microbic and bacterial diseases ride for hours and even days in the same cars with people who are perfectly well and free from infection, among whom many may be susceptible to invasion. Who shall say how many cases of consumption had their origin in a railroad car? Patients in the last stages of consumption are transported across the country and death not infrequently claims its victim ere home and friends can be reached. A recent instance was that of a young girl placed on the cars by unfeeling

persons and permitted to undertake a journey of a thousand miles, unattended and in such an exhausted state that she died before arriving at her destination, too weak, as the spark of life faded rapidly away, to reveal her identity.

Although the railroad companies have multiplied the comforts of travel many times when compared with the crude facilities of a quarter of a century ago, they have failed to realize their high responsibility for the preservation of health and the spread of disease, and continued to carry passengers in cars that were not properly disinfected. We do not mean to say that no attempt at all has been made by the companies to disinfect their passenger cars, but their work in this direction has been done mainly from an economical standpoint for the preservation of their property; the fundamental principles governing the prevention of disease and the protection of health by the approved methods of present day sanitary science were practically ignored. It gives us pleasure therefore to record the action taken at the last meeting of the State Board of Health, establishing rules and regulations governing the sanitary care of railroad cars and way stations in Missouri. On another page we print these rules and regulations in full. It is worthy of mention that the railroad companies readily consented to be governed by the Board's action.

Of course this will go a long way toward protecting the traveling public. It seems to us, however, that a more effective method of minimizing the dangers of transporting persons afflicted with contagious and infectious diseases in their active stages, would be to establish separate compartments in certain railroad cars and require all such persons to ride in these compartments. In this way the dissemination of disease would be confined to a known locality which could be readily disinfected. To illustrate the importance of such an arrangement we might instance the case of a man who was afflicted with glanders. The patient was a rich farmer who had contracted the disease from his mules, nine of which had died from glanders. This man traveled on the train and yet he was so afflicted that the physician whom he consulted, fearful of the contagion, refused to accept any money from him.

The day has come when railroads must begin a clearing-up crusade against the germ-bearing car.

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## THE "PHENOMENAL" KRAUSS.

R. J. ("phenomenal") Krauss, St. Louis' most shameless medical advertiser, has been arrested by the Federal authorities charged with misusing the mails. This step, we hope, marks the beginning of the end

to a career which has caused all clean-minded people, lay and medical, to blush for the fair name of our city.

Krauss' methods of advertising his business did not take the ordinary form usually followed by advertising doctors. Scorning the commonplace advertising in the regular display advertising columns of newspapers, Krauss' advertisements were written in the third person and were published in the regular news columns of the newspapers, with headlines similar to the type used for headings to legitimate news items; thus a cursory reading would leave the impression that the article was written by some person connected with the paper and that it was published as a bit of local news. The only mark in the whole article which showed it to be an advertisement was the insertion of three asterisks at the end. To the initiated this at once stamped it as advertising matter, but few indeed realized the import of these little stars, and usually, of course, they were overlooked altogether. This form of advertising should be suppressed by the newspapers. It is reprehensible at all times and is particularly obnoxious in medical advertising.

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## THE SPRINGFIELD MEETING OF THE STATE ASSOCIATION.

The committee of arrangements announces that all plans for the entertainment of the Association at Springfield have been completed and everything is in readiness. The general sessions will convene in the Baldwin Theatre Building, the Surgical Section will meet in the Y. M. C. A. Building and the Medical Section will meet in the Springfield Club rooms. The Colonial Hotel is headquarters. All meeting places are in close proximity to the hotel, the Baldwin Theatre being next door, the Y. M. C. A. Building just across the street and the Springfield Club one block distant.

While the first day will be devoted to the business affairs of the Association in the House of Delegates and the Judicial Council, members are urged to be present on this day in order to listen to the proceedings of these two bodies and hear the address of the president and the orations on medicine and surgery on the evening of this day. Wednesday evening the antituberculosis societies will have a general meeting in the Baldwin Theatre. Every member of the Association is interested in the progress of the crusade against tuberculosis and this meeting will demonstrate the great work that is being done in this direction. The Medical and Surgical Sections have a total of 105 papers scheduled for reading, a splendid tribute to the great interest now manifest in Association work.

The list of hotels and boarding houses is published in the program. Dr. J. R. Boyd is secretary of the local committee on arrangements and will gladly and promptly answer all inquiries for further information; members of this committee will be present at the Information Bureau during the meeting.

There will be no entertainments of an official nature but the alumni associations of medical colleges will enjoy reunions around the banquet table.

## ROSTER OF MEMBERS.

In this issue we publish a complete roster of members who have paid dues up to the time of going to press. All members not represented in this list are delinquent in their county societies and cannot therefore be counted as members of the State Association, nor can they obtain membership in the American Medical Association, until their dues are paid to their local society. After this issue no copies of the JOURNAL will be sent to delinquent members.

We urge all who have neglected to pay their dues to do so at once; thus they will enjoy all the benefits of affiliation with the organized profession of the State, without interruption, and the Association will be strengthened. Every reputable physician in the State profits greatly by membership in the organized body of the profession and the profession needs and deserves the support of every reputable physician in the State. Again, therefore, we urge all delinquent members to pay their dues promptly.

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## COUNTY SECRETARIES' ASSOCIATION.

A meeting of the County Secretaries' Association will be held at Springfield on May 20th at 6 p. m., arrangements being made for a dinner at that hour at the Colonial Hotel, for which a charge of one dollar per plate will be made.

All secretaries and councilors are requested to be present.

At this meeting permanent organization will be effected and plans discussed for the future work of the Association.

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## TANEY COUNTY ORGANIZED.

Dr. T. A. Coffelt, Councilor of the Twenty-Eighth District, reports the organization of Taney County Medical Society. With the affiliation of Taney County, the Twenty-Eighth District is fully organized, each of the seven counties having a local medical society in affiliation with the State Association. We welcome the affiliation of Taney County Medical Society with our Association and shall look forward to the publication of the reports of work done by our members in Taney County. Following is a list of the charter members: Drs. Charles W. Burdett, Branson; Elizabeth McIntyre, Branson; R. M. Irwin, Gretna; Guy B. Mitchell, Forsyth; O. C. Houston, Forsyth; F. V. Baldwin, Forsyth; J. P. Compton, Branson; H. Humphreys, Kissee Mills; J. O. Nicholson, Protem.

The officers for 1908 are: President, Dr. Charles W. Burdett, Branson; vice-president, Dr. J. O. Nicholson, Protem; secretary, Dr.

Elizabeth McIntyre, Branson; treasurer, Dr. J. P. Compton, Branson; delegate to the State Association, Dr. Charles W. Burdett, Branson.

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## TO THE GRADUATES OF THE MISSOURI MEDICAL COLLEGE.

A banquet will be given by the Alumni Association of the Missouri Medical College on Wednesday, May 20th, at the Springfield Club, six o'clock p. m., during the State Medical Association at Springfield. All graduates of the Missouri Medical College who desire to attend and participate in this banquet, are urgently requested to forward, at once, name and address with $1.50 to Dr. T. A. Coffelt, Springfield, Mo., in order that arrangements may be completed.

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## TO GRADUATES OF MEDICAL DEPARTMENT ST. LOUIS UNIVERSITY.

The St. Louis University Alumni will meet at a luncheon at the Springfield Club at noon on Wednesday, May 20th, at Springfield. All graduates of Marion Sims Medical College, Beaumont Hospital Medical College and of the Medical Department St. Louis University, are invited to be present.

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Members attending the Springfield meeting may have important mail and telegrams addressed to them at Springfield, care of the Information Bureau, Colonial Hotel.

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The annual meeting of the American Medical Editors' Association will be held at the Auditorium Hotel, Chicago, May 30th and June 1st. An interesting program has been arranged for the occasion and all members are urged to be present.

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The Senate has passed the bill providing a pension of $125 monthly for the widows of Drs. James Carroll and Jesse W. Lazear; it received the unanimous approval of the members of the Senate. The bill will come before the House of Representatives for passage after being reported by the Committee on Pensions and we anticipate favorable and prompt action by that body.

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"Dr." J. H. Cantlon, formerly of Cape Girardeau, has been apprehended and is now under arrest at Cape Girardeau. Cantlon gave bond

to appear for trial on the charge of practicing medicine without a license but did not appear when his case was called. We understand the prosecuting attorney of Cape Girardeau will take measures to prevent Cantlon from escaping trial a second time.

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New and non-official remedies approved by the Council on Pharmacy and Chemistry:

Aromatic Cordial P-M Co. (Pitman-Myers Co.)
Oleum Ricini Dulcis P-M Co.
Atoxyl Hypodermic Tablets 1-3 grain (Koechl & Co.).
Novacaine Hypodermic Tablets 1-3 grain (Koechl & Co.).
Dry Peptonoids (Soluble), Arlington Chem. Co.

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The Emperor of Germany has recently appointed a group of the most prominent physicians and laymen as delegates to the International Congress on Tuberculosis that convenes in Washington, September 21st. As the summer campaign draws near, interest in the coming Congress gains headway. We have received letters from the Transportation Committee requesting us to give them the number of those going from Missouri. We should muster a delegation of not less than two hundred. Most of those should be laymen. Let every physician in his community urge at least one layman to join the Congress and be present at the meeting. Send communications to Dr. John S. Fulton, 714 Colorado Building, Washington, D. C.

In this important, world-wide move, let us show our keen interest by our attendance.

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Prof. August Martin, emeritus professor of gynecology in the University of Greiswald, and well known all over the world as the editor of the *Monatsschrift fuer Geb. und Gyn.,* spent Sunday and Monday, April 19th and 20th, in St. Louis. A reception in his honor was given by the Obstetrical Section of the St. Louis Medical Society. He visited the Skin and Cancer and St. Anthony's Hospitals and the Medical Departments of Washington and St. Louis Universities, and had many words of praise for the beauty of the city and the excellence of the facilities for teaching medicine.

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Dr. Robert Koch, of Berlin, the noted German scientist, is touring this country enroute to Japan. Dr. Koch rested in St. Louis for a few days and visited his relatives in that city. The medical profession of St. Louis made considerable preparation to honor this eminent man, who contributed so much to the advancement of medical science, and planned a large banquet for his entertainment, but Dr. Koch refused to permit any public demonstration in his honor.

## SANITARY RULES FOR RAILROADS IN MISSOURI ADOPTED BY UNANIMOUS VOTE OF THE STATE BOARD OF HEALTH.

The State Board of Health shall have general supervision over the health and sanitary interests of the citizens of the State. (Article 1, Chapter 3, Section 7529, Revised Statutes of 1899.)

Acting in harmony with this section of law, the following rules are hereby established by the State Board of Health governing the sanitation of steam railway coaches, dining cars, sleeping cars and all waiting rooms and stations located in towns, villages and cities in Missouri.

Rule 1. Steam Railway Coaches. Day coaches shall be thoroughly cleaned at the end of each trip, and in no instance shall a day coach go uncleaned longer than two days. Water coolers shall be frequently emptied, rinsed and scalded, and shall be filled with potable water when in service. Day coaches shall be disinfected with formaldehyde gas, in quantities of not less than 40 fluid ounces of 40 per cent. formaldehyde to each coach, at the period of general cleansing and renovation, said period not to exceed 90 days, and also whenever a case of any listed disease is known to have been carried.

There must be one spittoon for each seat in smokers, which must be cleansed each day and at least 2 oz. of some approved antiseptic placed therein.

Rule 2. Parlor, buffet and dining cars shall be cleansed at cleaning terminals as set forth in rule 1; carpets and draperies to be removed, dusted, sunned and aired, provided meteorological conditions permit. Closets, drawers and cupboards to be cleaned, scalded and treated with a 1 or 2 per cent. solution of formaldehyde at least once each week in spring, summer and autumn months, and every two weeks in winter months. Food boxes and refrigerators to be scalded and treated with some approved antiseptic at least once a week during the spring, summer and autumn months and twice a month during the winter months.

Rule 3. Placards shall be displayed in all railway coaches in Missouri having plainly displayed thereon, the following notice:

SPITTING ON THE FLOOR IS FORBIDDEN.

Consumption, lagrippe, coughs, colds and all diseases of the air passages are spread by spitting, and these maladies kill 10,000 people annually in Missouri. It is therefore forbidden to spit on the floor.

Penalty, five dollar fine.

It is the duty of trainmen to warn against violating this health rule. By order of the

MISSOURI STATE BOARD OF HEALTH.

Rule 4. All waiting rooms and stations located in towns, villages and cities in Missouri shall be kept clean and in sanitary condition, and provided with spittoons, and when any listed disease is known to have been in a waiting room it shall be thoroughly disinfected with formaldehyde gas, as described in Rule 1. A placard shall also be displayed in all waiting rooms and stations having plainly displayed thereon the following notice:

SPITTING ON THE FLOOR IS FORBIDDEN.

Consumption, lagrippe, coughs, colds and all diseases of the air passages are spread by spitting, and these maladies kill 10,000 people annually in Missouri. It is therefore forbidden to spit on the floor.

Penalty, five dollar fine.

It is the duty of station employees to warn against violating this health rule. By order of the

MISSOURI STATE BOARD OF HEALTH.

Rule 5. These rules shall not apply to steam and electric railways operated entirely within any municipality in this State.

Rule 6. The listed or contagious diseases are smallpox, diphtheria, membranous croup, scarlet fever, yellow fever, typhus fever, cholera, bubonic plague and leprosy.

## Fifty-First Annual Meeting

# MISSOURI STATE MEDICAL ASSOCIATION

## Springfield, May 19, 20 and 21, 1908

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### OFFICERS, 1907-8

*PRESIDENT.*

W. S. Allee, M. D. ..... Olean

*VICE PRESIDENTS.*

Thos. B. Cooke, M. D. ..... Rayville
A. H. Vandivert, M. D. ..... Bethany
Chas. Hough, M. D. ..... Jefferson City
J. P. Dunnigan, M. D. ..... Sullivan
O. F. Pile, M. D. ..... Memphis

*SECRETARY.*

A. W. McAlester, Jr., M. D. ..... Kansas City

*ASSISTANT SECRETARIES.*

Paul Y. Tupper, M. D. ..... St. Louis
Gail Allee, M. D. ..... Lamar

*TREASURER.*

J. Franklin Welch, M. D. ..... Salisbury

*MEDICAL SECTION.*

Chairman: T. F. Lockwood, M. D. ..... Butler
Secretary: Gail Allee, M. D. ..... Lamar

*SURGICAL SECTION.*

Chairman: H. E. Pearse, M. D. ..... Kansas City
Secretary: P. Y. Tupper, M. D. ..... St. Louis

*ORATORS.*

Oration on Medicine: John H. Duncan, M. D. ..... St. Louis
Oration on Surgery: Herman E. Pearse, M. D. ..... Kansas City

### COMMITTEES

*ARRANGEMENT COMMITTEE.*

Members of Greene County Medical Society.

*COMMITTEE ON SCIENTIFIC WORK.*

H. E. Pearse, M. D. — T. F. Lockwood, M. D.
P. Y. Tupper, M. D. — Gail Allee, M. D.

*PUBLICATION COMMITTEE.*

W. B. Dorsett, M. D., Chairman.
M. B. Clopton, M. D. — M. C. Shelton, M. D.

*COMMITTEE ON PUBLIC POLICY AND LEGISLATION.*

C. E. Fulton, M. D., Chairman.
H. E. Pearse, M. D. — Geo. W. Wilson, M. D.

*COMMITTEE ON MEDICAL EDUCATION.*

N. B. Carson, M. D., Chairman.
C. M. Jackson, M. D. — E. W. Schauffler, M. D.

*COMMITTEE ON TUBERCULOSIS.*

Wm. Porter, M. D., Chairman.
W. M. Bayliss, M. D. — J. B. Norman, M. D.
M. P. Overholser, M. D. — Tinsley Brown, M. D.

# PROGRAM

## GENERAL SESSIONS

### Baldwin Theatre

*TUESDAY, MAY 19TH—7:30 P. M.*

Address of President.....W. S. Allee, M. D., Olean
Oration on Medicine.....John H. Duncan, M. D., St. Louis
Oration on Surgery.....Herman E. Pearse, M. D., Kansas City

### Baldwin Theatre

*WEDNESDAY, MAY 20TH—8:00 P. M.*

ANNUAL MEETING (PUBLIC) OF MISSOURI ASSOCIATION FOR THE PREVENTION AND RELIEF OF CONSUMPTION.

President's Address.....George Homan, M. D., St. Louis
Secretary's Report.....R. L. Newton, St. Louis
Report of Local Associations.
General Business.
Stereopticon Illustrations.

### Springfield Club

*THURSDAY, MAY 21ST—9:00 A. M.*

Election of President.
Election of Orator on Medicine.
Election of Orator on Surgery.
Selection of place of next meeting.

# PROGRAM

*FIRST DAY—TUESDAY, MAY 19TH.*

House of Delegates called to order at 9:30 a. m.
Judicial Council called to order at 9:30 a. m.
Roll call.
Reading of minutes of previous meeting.
Reading of President's message and recommendations.
Report of Committee on Arrangements.
Report of Committee on Medical Education.
Report of Committee on Scientific Work.
Report of Committee on Public Policy and Legislation.
Report of Publication Committee.
Report of Special Committees.
Report of Treasurer.
Report of Secretary.
Election of Committee on Nominations.
Election of Delegates to American Medical Association. (Two to elect to serve two years.)
Proposed amendments to the Constitution and By-Laws.
Reading of Resolutions, Memorials, etc.
Miscellaneous business.

## Report of Councilors

1st District....C. L. Evans, Oregon
2nd District....W. T. Elam, St. Joseph
3rd District....G. W. Whitely, Albany
4th District....C. R. Buren, Princeton
5th District....E. E. Parrish, Memphis
6th District....H. Jurgens, Edina
7th District....L. W. Dallas, Hunnewell
8th District....W. B. Dorsett, St. Louis
9th District....Woodson Moss, Columbia
10th District....C. W. Reagan, Macon
11th District....J. D. Brummall, Salisbury
12th District....E. H. Miller, Liberty
13th District....N. P. Wood, Independence
14th District....C. T. Ryland, Lexington
15th District....M. P. Overholser, Harrisonville
16th District....J. R. Buchanan, Nevada
17th District....R. D. Haire, Clinton
18th District....Frank DeVilbiss, Eugene
19th District....G. Ettmueller, Jefferson City
20th District....F. J. Lutz, St. Louis
21st District....B. M. Hypes, St. Louis
22nd District....J. D. Porterfield, Jr., Cape Girardeau
23rd District....T. C. Allen, Bernie
24th District....J. J. Norwine, Poplar Bluff
25th District....Frank Harrison, Farmington
26th District....R. L. Johnson, Rolla
27th District....H. C. Shuttee, West Plains
28th District....T. A. Coffelt, Springfield
29th District....A. R. Snyder, Joplin

# MEDICAL SECTION

## Springfield Club

*SECOND DAY—WEDNESDAY, MAY 20, 1908.*

*MORNING SESSION—9:00 O'CLOCK.*

1. The State's Responsibility to Its Citizens from a Medical Standpoint.....J. A. McComb, M. D., Lebanon
2. Feeding Experiments on Animals Applied in Surgery and Internal Medicine.....Fenton B. Turck, M. D., Chicago, Ill.
3. The Treatment of Visceral Ptosis by Respiratory Exercises.....Chas. Shattinger, M. D., St. Louis
4. Myocardial Degeneration—Prophylaxis.....B. H. Zwart, M. D., Kansas City
5. The Present Stand and Thought Regarding Opsonins.....S. A. Johnson, M. D., Nevada
6. The Passing of an Old Therapy.....O. L. Peak, M. D., Springfield
7. Conservatism in Medicine.....W. L. Brosius, M. D., Gallatin
8. Syphilis of the Central Nervous System.....C. R. Woodson, M. D., St. Joseph
9. Lupus Erythematosus.....Phillip Kanoky, M. D., Kansas City

*SECOND DAY—WEDNESDAY, MAY 20, 1908.*

*AFTERNOON SESSION—1:30 O'CLOCK.*

SYMPOSIUM ON TUBERCULOSIS.

10. The Application of Tuberculin to the Eye as a Means of Diagnosis.....A. W. McAlester, Jr., M. D., Kansas City
11. Roentgen Ray as an Aid to the Diagnosis of Tuberculosis of the Lungs, with Demonstration of Skiagrams.....Wm. Engelbach, M. D., St. Louis, and R. D. Carman, M. D., St. Louis
12. Early Diagnosis of Tuberculosis and Use of Tuberculin in Diagnosis and Treatment.....E. H. Schorer, M. D., Columbia
13. Care of the Consumptive.....E. W. Schauffler, M. D., Kansas City
14. Public Education Against Tuberculosis Infection.....T. F. Lockwood, M. D., Butler
15. Universities and Colleges as Factors in the Educational Campaign.....W. McN. Miller, M. D., Columbia
16. Report from the State Sanatorium for Incipient Tuberculosis.....O. H. Brown, M. D., Mt. Vernon
17. Clinical Reports from Mt. St. Rose.....S. Cameron, M. D., St. Louis
18. The Responsibility of Boards of Health.....A. H. Hamel, M. D., DeSoto
19. Methods in Force and Proposed in St. Louis.....H. Wheeler Bond, M. D., St. Louis

The discussion will be opened by Drs. L. M. Warfield, S. L. Baysinger, J. C. Eaton and J. M. Allen.

In order to afford ample time for discussion, the symposium will be called to order promptly and the time limit of papers, which is twenty minutes, will be observed.

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*THIRD DAY—THURSDAY, MAY 21, 1908.*

*MORNING SESSION—9:00 O'CLOCK.*

20. Malpractice from the Doctor's Standpoint.....
.....Jno. Ashley, M. D., Bloomfield
21. The Interpretation and Treatment of Headache.....
.....W. A. Clark, M. D., Jefferson City
22. Angina Pectoris.....Franklin E. Murphy, M. D., Kansas City
23. The Examination of the Feces as a Routine Procedure.....
.....Jesse S. Myer, M. D., St. Louis
24. Therapeutics.....W. A. McKelvey, M. D., Minden Mines
25. The Physician's Relation to the Pharmacist, Practically Considered.....J. L. Ormsbee, M. D., Springfield
26. Prophylaxis of Insanity.....G. Wilse Robinson, M. D., Nevada
27. Diabetes Mellitus.....T. N. Bogart, M. D., Excelsior Springs
28. Echinacea Angustifolia.....J. W. Clark, M. D., Carterville
29. Acute Articular Rheumatism; Its Cause, Mode of Infection and Treatment.....J. J. Ferrell, M. D., Owensville

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*THIRD DAY—THURSDAY, MAY 21, 1908.*

*AFTERNOON SESSION—1:30 O'CLOCK.*

30. Therapeutics and Its Relation to the Practitioner.....
.....G. W. Whitely, M. D., Albany
31. Irrational Use of Drugs in the Treatment of Diseases.....
.....W. G. Cowan, M. D., Sedalia
32 Sanitation of Churches, Public Halls and Assembly Rooms....
.....A. H. Vandivert, M. D., Bethany
33. Endocarditis.....J. S. Triplett, M. D., Harrisonville
34. Clinical and Experimental Experience in the Dietary Treatment of Hyperchlorhydria.....F. W. Froehling, M. D., Kansas City
35. Chronic Gastritis.....W. R. Beattie, M. D., Marshfield
36. Leukemia.....P. Donohoo, M. D., Joplin
37. Cerebro-Spinal Meningitis.....G. W. Goins, M. D., Breckinridge
38. Pneumonia.....Tinsley Brown, M. D., Hamilton
39. The Doctor in Politics; or, His Civic Responsibilities.....
.....E. G. Beers, M. D., Springfield
40. Filariasis Nocturna: Two Cases.....Jos. Grindon, M. D., St. Louis
41. Epilepsy, with Special Reference to Use of Thyroid Extract....
.....T. E. Graham, M. D., St. Louis
42. Care and Treatment of Rhinitis.....Noah Adams, M. D., Kansas City

43. Ethics.....C. W. Watts, M. D., Fayette
44. Treatment of Rheumatism.....Ira A. Marshall, M. D., Ironton
45. A Neurological Opinion in a Case of Supposed Traumatic Neurosis .....W. W. Graves, M. D., St. Louis

## SURGICAL SECTION

### Y. M. C. A. Hall

*SECOND DAY—WEDNESDAY, MAY 20, 1908.*

*MORNING SESSION—9:00 O'CLOCK.*

1. The Removal of Bodies from the Respiratory Tract and Oesophagus by Bronchoscope; With Report of Cases..... .....Hal Foster, M. D., Kansas City
2. Stricture of the Oesophagus....Chester E. Fulton, M. D., Springfield
3. Report of Case of Non-Malignant Stenosis of Pylorus of Two Years' Duration—Posterior Gastro-Enterostomy—Death Due to Reverse Peristalsis.....R. F. Amyx, M. D., St. Louis
4. Pyloric Spasms.....Frank Joseph Tainter, M. D., St. Charles
5. Cancer of the Rectum.....N. B. Carson, M. D., St. Louis
6. The Present Status of the Treatment of Cancer..... .....N. F. Terry, M. D., Springfield
7. Carcinoma of the Female Breast..... .....Jabez N. Jackson, M. D., Kansas City
8. Symposium on Gall Stone Diseases:
   Pathology.....Willard Bartlett, M. D., St. Louis
   Symptoms.....Roland Hill, M. D., St. Louis
   Remote Consequences.....Jno. C. Morfit, St. Louis
   Treatment.....C. M. Nicholson, M. D., St. Louis
9. Operations on the Gall Bladder.....T. E. Potter, M. D., St. Joseph
10. Gall Stone Disease.....Orville H. Dove, M. D., Kansas City

*SECOND DAY—WEDNESDAY, MAY 20, 1908.*

*AFTERNOON SESSION—1:00 O'CLOCK.*

11. Hypernephroma.....Jacob Geiger, M. D., St. Joseph
12. Differential Diagnosis Between Floating Kidney and Hydrops of the Gall Bladder.....Frank G. Nifong, M. D., Columbia
13. Some Clinical, Pathologic and Surgical Phases of Stones in the Kidneys.....A. H. Cordier, M. D., Kansas City
14. A Review of Three Hundred Ureter Catheterizations in their Relation to Diagnosis and Treatment..... .....Bransford Lewis, M. D., and C. E. Burford, M. D., St. Louis
15. Bladder Drainage.....C. F. Roberts, M. D., Kansas City
16. Rupture of Bladder.....H. C. Dalton, M. D., St. Louis
17. Cystocele.....Gordon A. Beedle, M. D., Kansas City
18. Appendicitis.....W. S. Shirk, M. D., Sedalia
19. Hematuria as a Complicating Factor in Appendicitis..... .....M. G. Seelig, M. D., St. Louis

20. Typhoid Perforation.....Malvern B. Clopton, M. D., St. Louis
21. Pseudomyxoma Peritonei: Report of Case.....
.....O. B. Campbell, M. D., St. Joseph
22. Subserous Hernia of the Abdominal Wall.....
.....J. D. Griffith, M. D., Kansas City
23. A Brief Consideration of Post-Operative Gas Distention of the Abdomen, With Suggestion for Prevention.....
.....Fritz J. Moennighoff, M. D., Kansas City
24. Remarks on Intestinal Anastomosis..Francis Reder, M. D., St. Louis

*THIRD DAY—THURSDAY, MAY 21, 1908.*

*MORNING SESSION—9:00 O'CLOCK.*

25. Importance of Early Surgical Interference in Tumors of the Breast.....L. S. Wright, M. D., Lowry City
26. The Danger of Permitting Warts and Moles to Grow, Lest They Become Malignant; With Report of Twenty-five Illustrative Cases From the St. Louis Skin and Cancer Hospital.....
.....Edmund A. Babler, M. D., St. Louis
27. The Preparatory and After-Treatment of Surgical Cases.....
.....J. N. Barger, M. D., Darlington
28. How to Recognize Amongst Cases of Deafness Long Abandoned as Hopeless those Susceptible of Radical Relief by Tympanic Resection; With Notes from Practice.....
.....Robert Barclay, M. D., St. Louis
29. Surgery In a Country Practice.....W. H. Wiley, M. D., Ridgeway
30. Empyema.....Frank J. Lutz, M. D., St. Louis
31. Treatment of Fractures Adjacent to Joints; With Report of Cases.....Wm. A. Shelton, M. D., Kansas City
32. Congenital Dislocation of the Hip.....
.....Nathaniel Allison, M. D., St. Louis
33. The Technic of Hysterectomy..Arthur E. Hertzler, M. D., Kansas City
34. Eversion of the Uterus, with Expulsion of a Large Fibromyoma.
.....Frank Hinchey, M. D., St. Louis
35. A Modification in the Technique of Abdominal Supra-Vaginal Hysterectomy.....St. Elmo Sanders, M. D., Kansas City
36. Fibroids of the Uterus Complicated with Pregnancy.....
.....W. B. Dorsett, M. D., St. Louis
37. When Should Operation Be Performed in Ruptured Tubal Pregnancy?.....H. S. Crossen, M. D., St. Louis

*THIRD DAY—THURSDAY, MAY 21, 1908.*

*AFTERNOON SESSION—1:00 O'CLOCK.*

38. Treatment of Fractures of the Shaft of the Femur.....
.....W. B. Deffenbaugh, M. D., St. Joseph
39. What is the Significance of Gaseous Products When Found in Contused and Lacerated Wounds?....W. B. Outten, M. D., St. Louis
40. Personal Experience in Gun-Shot Wounds..Jno. D. Seba, M. D., Bland
41. Tuberculous Lymph-Adenitis of the Mesenteric Lymph-Nodes....
.....Louis Rassieur, M. D., St. Louis
42. Personal Experience in the After-Treatment of Surgical Cases..
.....Willard Bartlett, M. D., St. Louis
43. Burn and Treatment.....T. J. Reiley, M. D., West Plains

44. Infections of the Knee Joint and Treatment.....
.....Walter C. G. Kirchner, M. D., St. Louis
45. Treatment of Tuberculous Fistula in Ano; With Report of Cases.
..... .....E. H. Thrailkill, M. D., Kansas City
46. Fissure in Ano.....W. H. Coffey, M. D., Kansas City
47. Stricture of the Sigmoid or Rectum.....J. D. Potts, M. D., St. Louis
48. The Operative Treatment of Hemorrhoids.....
.....W. H. Stauffer, M. D., St. Louis
49. Distinctive Features of Railroad Surgery that Peculiarize this Class of Injuries.....J. W. Dreyfus, M. D., Louisiana

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*THIRD DAY—THURSDAY, MAY 21, 1908.*

*EVENING SESSION—8:00 O'CLOCK.*

50. Nicholas Senn; His Life and Character.....
.....G. Wiley Broome, M. D., St. Louis
51. Artificial Anus at the Umbilicus Caused by Cancerous Suppuration Originating at the Ovaries or Uterus.....
.....W. H. Gibbins, M. D., Clinton
52. Some Operations I Have Done Above the Shoulder Joint.....
.....Geo. Halley, M. D., Kansas City
53. Excision of the Lachrymal Sac as a Radical Cure for Chronic Inflammatory Processes Thereof.....
.....Llewellyn Williamson, M. D., St. Louis
54. The General Management of Surgical Work in the Country.....
.....E. C. Grim, M. D., Kirksville
55. Modern Operations for the Radical Cure of Hernia.....
.....C C. Morris, M. D., St. Louis
56. Divulsion of the Scalp and Other Severe Scalp Injuries.....
.....Ernest F. Robinson, M. D., Kansas City
57. Fracture of the Neck of the Femur; Why It Occurs; Why a Large Per Cent. of Cases are Diagnosed Too Late for Successful Treatment; Treatment.....J. H. Tanquary, M. D., St. Louis
58. The Treatment of Diffuse Septic Peritonitis.....
.....W. S. Wiatt, M. D., East St. Louis
59. A Demonstration of Simple and Radical Mastoid Operations and Method of Entering the Cranium Through Temporal Bone for Intra-Cranial Complications of Middle Ear Suppurations.....
.....Alvah M. Wilson, M. D., St. Louis

# CORRESPONDENCE

[By request of the Secretary of the St. Louis Medical Society we publish the following for the information of the members.—Ed.]

## PROPOSED AMENDMENT TO THE BY-LAWS TO BE INTRODUCED IN THE HOUSE OF DELEGATES, MISSOURI STATE MEDICAL ASSOCIATION.

Let there be a new section to Chapter VIII of the By-Laws of the Missouri State Medical Association, to be known as Section 6, which may read as follows:

The Medico-Legal Committee shall consist of three members, who shall, upon request and in compliance with the conditions hereinafter named, aid in the defense of suits for alleged malpractice instituted or threatened against any member of the association. Conditions:

(a) Any member desiring to avail himself of the provisions of this section shall, so soon as possible, after any demand has been made upon him, present to the committee his request for aid in the defense together with a full and complete history of the case and the services therein rendered. The committee shall then, with the aid of its counsel, advise said member up to the time of the institution of suit without any expense to the member so charged. Should the member desire the committee's services subsequent to the institution of suit, he shall authorize the committee to further aid in the defense of said suit. The committee shall thereupon without expense to the member provide for all medical expert services necessary for the trial and the necessary legal services of its counsel; Provided, that the committee shall not obligate itself or the Association for the payment of any damages awarded in the trial or upon compromise.

(b) Such medico-legal aid or defense as is herein specified refers only to civil malpractice and is not to be construed to apply to criminal prosecutions.

(c) The committee with the approval of the House of Delegates shall have authority to employ counsel for the term of one year to advise as aforesaid and to represent any member of the Association in suits for alleged malpractice upon the terms hereinabove provided. The compensation of the attorney shall be determined by the Committee with the approval of the House of Delegates.

## RESOLUTION TO BE INTRODUCED IN HOUSE OF DELEGATES, MISSOURI STATE MEDICAL ASSOCIATION.

Resolved that:

For the purpose of providing aid or defense to members charged with civil malpractice and to defray expenses necessary under Section 6, Chapter 8, there is hereby established a legal defense fund and there is immediately appropriated out of the Treasury of the Association the sum of $1500 to be used for the purpose aforesaid, under the supervision of the Medico-Legal Committee.

The following letter was sent to each county society:

Legal defense in suits instituted or threatened for alleged malpractice is now furnished by a number of state and county societies. In 1907 it was adopted by the St. Louis Medical Society. Upon recommendation of the Society the delegates desire to urge the adoption of legal defense by the Missouri State Medical Association. Therefore we are asking each county society to coöperate with us in this movement by instructing their delegates to the State Association on this matter. We recommend such changes in the By-Laws of the State Association as will insure for the members all expenses of legal defense except the payment of judgment.

We send herewith a copy of the proposed amendments gotten up by the Medico-Legal Committee, with the assistance of the attorney of the St. Louis Medical Society. We also enclose a copy of the resolutions which our delegates propose to introduce at the next meeting to the State Association. This resolution sets aside $1500 out of the treasury of the State Association to be put to the uses of legal defense by the appropriate committee. If adopted by the State Association, legal defense will serve as a very material advantage of membership, and will therefore prove attractive in increasing our membership. It will reduce the number of lapsing members to a minimum and it will practically do away with the habit that some physicians have of joining, dropping out and rejoining the Association. It will also promote the more prompt payment of dues. This plan of legal defense is now in successful operation in the New York, Pennsylvania, Maryland and Illinois State Medical Societies, and a number of other state societies have it under consideration.

The essential features for medical defense in vogue in these different organizations are identical in principle, although differing somewhat in detail. These features are: First, the establishment of a medical defense fund by the allottment thereto of a certain proportion of the annual dues; second, the creation of a medico-legal committee to investigate charges of alleged malpractice brought against any member; third, the employment of regular counsel to advise with the committee and the accused member; fourth, in the event of trial the employment of the official attorneys (or others at the discretion of the accused) to conduct the defense.

Mr. James Taylor Lewis, counsel for the Medical Society of the State of New York, has this to say in a letter to the Chairman of the Medico-Legal Committee of the St. Louis Medical Society:

"This State was the pioneer so far as America is concerned, although a similar defense has been conducted abroad. The defense was begun about six years ago and since this time have had to dispose of over 350 cases wherein malpractice was charged by a patient and during that time I have had the extreme good fortune to have lost but one action—a verdict for $1900.00, which is now on appeal to the highest court of our State and will be heard during the present year.

"It is fair to say, therefore, that the plan is manifestly successful. It is to be understood, of course, that not in all cases has a summons and complaint been actually served upon the physician, for it has been my endeavor to avoid what at best would be unpleasant litigation to any physician, as no doctor cares to have his professional standing a matter of discussion in a court of law.

"There are two classes of these malpractice actions: One is the case where a doctor desires to sue for his bill for personal services and is met with a counter-claim charging a malpractice, and the other is the

charge or suit brought outright that the physician has been guilty of improper treatment or improper advice to his patient.

"The greatest cause for these suits appears to result from alleged improper repair of fractures, although every conceivable ailment has been the foundation for attack.

"Statistics have shown that about 97 per cent. of these claims are blackmail. The other 3 per cent. presenting questions which might fairly be said to be a proper subject for consideration for a court and jury. When the defense was begun statistics showed that about one physician in about 150 of the State of New York was annually sued for malpractice. The statistics for 1906 shows that about 1 physician in 350 has been sued and the first six months of 1907 shows a further reduction; all of which goes to demonstrate the moral effect upon the public of continuous and persistent and organized effort on behalf of the medical profession of this State.

"The expense necessarily incident to this preparation for trial and the actual costs of an appeal by the defendant, I feel should be met by the State Society, and now that the defense has been so satisfactorily established in our State I shall bring this matter up at the next State Society meeting in January at Albany and advise the payments of such necessary disbursements.

"To the payment of any judgment which might be recovered against a defendant physician, I am unalterably opposed. I am opposed to the insurance plan for the same reason, namely, that if shyster attorneys and their clients are to be assured that if they recover their verdict they are certain to get their money an incentive to press the litigation is provided and is bound to work hard. The public should be brought to know that the representative organization in any event will fight to the court of last resort any attempt to mulct the physician in any sum, no matter how small, and as the public and the lawyer come to be made aware that this fighting defense is to be made so much more quickly will this class of individuals begin to feel the change from timidity and fear to actual hostility on the part of the doctor."

This is an important matter and should be acted on only after thorough consideration, therefore instead of having the delegates of the St. Louis Medical Society introduce the plan at the next meeting of the State Association, without previous notice, we are asking each county society to take up the matter and consider it on its merits so that the delegates representing them or the State Association may be able to act in accordance with the wishes of their Society.

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## PRIZES TO BE AWARDED BY THE INTERNATIONAL CONGRESS ON TUBERCULOSIS.

THE CENTRAL COMMITTEE OF THE INTERNATIONAL CONGRESS ON TUBERCULOSIS HAS ANNOUNCED THE OFFER OF THE FOLLOWING PRIZES.

I. A prize of $1,000 is offered for the best evidence of effective work in the prevention or relief of tuberculosis by any voluntary Association since the last International Congress in 1905. In addition to the prize of $1,000, two gold medals and three silver medals will be awarded. The prize and medals will be accompanied by diplomas or certificates of award.

Evidence is to include all forms of printed matter, educational

leaflets, etc.; report showing increase of membership, organization, classes reached—such as labor unions, schools, churches, etc.; lectures given; influence in stimulating local Boards of Health, schools, dispensaries, hospitals for the care of tuberculosis; newspaper clippings of meetings held; methods of raising money; method of keeping accounts.

Each competitor must present a brief or report in printed form. No formal announcement of intention to compete is required.

II. A prize of $1,000 is offered for the best exhibit of an existing sanatorium for the treatment of curable cases of tuberculosis among the working classes. In addition to the prize of $1,000, two gold medals and three silver medals will be awarded. The prize and medals will be accompanied by diplomas or certificates of award.

The exhibit must show in detail construction, equipment, management, and results obtained. Each competitor must present a brief or report in printed form.

III. A prize of $1,000 is offered for the best exhibit of a furnished house, for a family or group of families of the working class, designed in the interest of the crusade against tuberculosis. In addition to the prize of $1,000, two gold medals and three silver medals will be awarded. The prize and medals will be accompanied by diplomas or certificates of award. This prize is designed to stimulate efforts towards securing a maximum of sun-light, ventilation, proper heating, and general sanitary arrangement for an inexpensive home. A model of house and furnishing is required. Each competitor must present a brief with drawings, specifications, estimates, etc., with an explanation of points of special excellence. Entry may be made under competitor's own name.

IV. A prize of $1,000 is offered for the best exhibit of a dispensary or kindred institution for the treatment of the tuberculous poor. In addition to the prize of $1,000, two gold medals and three silver medals will be awarded. The prize and medals will be accompanied by diplomas or certificates of award.

The exhibit must show in detail construction, equipment, management and results obtained. Each competitor must present a brief or report in printed form.

V. A prize of $1,000 is offered for the best exhibit of a hospital for the treatment of advanced pulmonary tuberculosis. In addition to the prize of $1,000, two gold medals and three silver medals will be awarded. The prize and medals will be accompanied by diplomas or certificates of award.

The exhibits must show in detail construction, equipment, management and results obtained. Each competitor must present a brief or report in printed form.

VI. The Hodgkins Fund Prize of $1,500 is offered by the Smithsonian Institution for the best treatise that may be submitted on "The Relation of Atmospheric Air to Tuberculosis."

The detailed definition of this prize may be obtained from the Sec-

retary-General of the International Congress or Secretary of the Smithsonian Institution, Chas. D. Walcott.

VII. Prizes for Educational Leaflets:

A prize of $100 is offered for the best educational leaflet submitted in each of the seven classes defined below. In addition to the prize of $100, a gold medal and two silver medals will be awarded in each class. Each prize and medal will be accompanied by a diploma or certificate of award.

Competitors must be entered under assumed names.

A. For adults generally (not to exceed 1,000 words).

B. For teachers (not to exceed 2,000 words).

C. For mothers (not to exceed 1,000 words).

D. For in-door workers (not to exceed 1,000 words).

E. For dairy farmers (not to exceed 1,000 words).

F. For school children in grammar school grades (not to exceed 500 words).

In classes A, B, C, D, E, and F, brevity of statement without sacrifice of clearness will be of weight in awarding. All leaflets entered must be printed in the form they are designed to take.

G. Pictorial booklet for school children in primary grades and for the nursery.

Class G. is designed to produce an artistic picture-book for children, extolling the value of fresh air, sun-light, cleanliness, etc., and showing contrasting conditions. "Slovenly Peter" has been suggested as a possible type. Entry may be made in the form of original designs without printing.

VIII. A gold medal and two silver medals are offered for the best exhibits sent in by any States of the United States, illustrating effective organization for the restriction of tuberculosis. Each medal will be accompanied by a diploma or certificate of award.

IX. A gold medal and two silver medals are offered for the best exhibits sent in by any State or Country (the United States excluded), illustrating effective organization for the restriction of tuberculosis. Each medal will be accompanied by a diploma or certificate of award.

X. A gold medal and two silver medals are offered for each of the following exhibits; each medal will be accompanied by a diploma or certificate of award; wherever possible each competitor is required to file a brief or printed report:

A. For the best contribution to the pathological exhibit.

B. For the best exhibit of laws and ordinances in force June 1st, 1908, for the prevention of tuberculosis by any State of the United States. Brief required.

C. For the best exhibit of laws and ordinances in force June 1st, 1908, for the prevention of tuberculosis by any State or Country (the United States excluded). Brief required.

D. For the best exhibit of laws and ordinances in force June 1st, 1908, for the prevention of tuberculosis by any municipality in the world. Brief required.

E. For the society engaged in the crusade against tuberculosis having the largest membership in relation to population. Brief required.

F. For the plans which have been proven best for raising money for the crusade against tuberculosis. Brief required.

G. For the best exhibit of a passenger railway car in the interest of the crusade against tuberculosis. Brief required.

H. For the best plans for employment for arrested cases of tuberculosis. Brief required.

XI. Prizes of two gold medals and three silver medals will be awarded for the best exhibit of a work-shop or factory in the interest of the crusade against tuberculosis. These medals will be accompanied by diplomas or certificates of award.

The exhibit must show in detail construction, equipment, management, and results obtained. Each competitor must present a brief or report in printed form.

The following constitute the Committee on Prizes:

Dr. Charles J. Hatfield, Philadelphia, *Chairman*.
Dr. Thomas G. Ashton, Philadelphia, *Secretary*.
Dr. Edward R. Baldwin, Saranac Lake.
Dr. Sherman G. Bonney, Denver.
Dr. John L. Dawson, Charleston, S. C.
Dr. H. B. Favill, Chicago.
Dr. John B. Hawes, 2nd., Boston.
Dr. H. D. Holton, Brattleboro.
Dr. E. C. Levy, Richmond, Virginia.
Dr. Charles L. Minor, Asheville, N. C.
Dr. Estes Nichols, Augusta, Me.
Dr. M. J. Rosenau, Washington.
Dr. J. Madison Taylor, Philadelphia.
Dr. William S. Thayer, Baltimore.
Dr. Louis M. Warfield, St. Louis.

# COUNTY SOCIETY NOTES

## CHARITON COUNTY MEDICAL SOCIETY.

The Chariton County Medical Society enjoyed an interesting session at its meeting in Brunswick, April 9th. Dr. Wallace, second vice-president, occupied the chair and Drs. Edwards, Tatum, Kirkpatrick, Hawkins and McEuen were present and took part in the proceedings.

Dr. Edwards read a paper on "Tetanus" and reported a case following a gun-shot wound of the foot; the patient recovered.

Dr. McEuen read a paper on "Hysteria," which was well received.

Dr. Tatum presented the following clinic: Case I. A lady who, two weeks before, while rubbing clothes on a washboard, thrust a steel pin into the upper central part of the palm of the right hand. The pin was broken and part of it was supposed to have remained in the hand; it produced no symptoms until ten days later when there was slight pain and swelling of the wrist but no active inflammation. Dr. Edwards advised the use of a strong electro-magnet to locate and remove the pin. Dr. Hawkins advised the use of the x ray and operation. Case II. Girl, aged 16 years, in apparent good health, with history of several attacks coming on at irregular intervals in which she would toss about on the bed and refuse to speak or eat, continuing thus in one attack for four days. It was the opinion of the Society that this was a case of hysteria. Case III. Negro child three years of age had never walked; presented large prominent abdomen, enlargement of ankles and wrists, open fontanel and profuse perspiration on forehead. This was pronounced a case of rachitis. Case IV. Male twenty years old with conjunctivitis which seemed to be doing well under application of protargol solution.

Society adjourned to meet in Salisbury the second Thursday in May.—Oliver McEuen, M. D., Acting Secretary.

## GREENE COUNTY MEDICAL SOCIETY.

MEETING OF MARCH 28TH.

The committee on programs and scientific work reported a program for every meeting in the year and the same was adopted and ordered printed. It was decided to devote the 1st and 3rd Friday nights of each month to a postgraduate course of lectures and the committee was ordered to prepare and arrange same.

Dr. Terry read an interesting paper on "Opsonins." He said the general practitioner cannot hope to become very familiar with the theory of phagocytosis and the intricate technique of the pathologist, but we can appreciate the value of the conclusions.

The best definition of "opsonin" is that it is a substance present in the plasma of the blood which renders microbes susceptible of being taken up by the corpuscles; the destroying power of white blood corpuscles depends on the opsonin present; the opsonin index is a mathematical estimation of the fighting strength of the blood against infection.

Serum-theraphy has given us some brilliant cures, but more failures, and while it is not all that could be desired it has placed the medical profession in a position of hopeful waiting with a profound respect for those who are laboriously endeavoring to solve the riddle of infectious diseases.

Dr. Rienhoff in discussing the paper said opsonins were, so to speak, "go-betweens."

MEETING OF APRIL 10TH.

Dr. Earle Thomas, of Springfield, and Dr. T. C. Miller, of Ash Grove, were elected to membership in the society.

President Coffelt reported that Dr. Porter, of St. Louis, was coming here to deliver a lecture on tuberculosis, and it was decided that the society should entertain Dr. Porter while here. Drs. Ralston, Patterson, Fortner, Boyd and Tefft were appointed a committee to take charge of this work and assist in the formation of a local Antituberculosis Society under the direction of Dr. Porter.

Dr. Smith read a very interesting paper on "Scarlatina." The history of this disease is obscure, although described as early as 1670. It is known in nearly all parts of the world but is uncommon and mild in our southern states. It is due to a specific cause, its severity is increased by a mixed infection, and it is contagious but as a rule is confined to one attack. Nephritis occurs in 15 to 20 per cent. of the cases, complications are most often caused by streptococci and may cause inflammation of any organ in the body; the sequelæ are sometimes severe.

Drs. Crane, Cox, Coffelt, Fortner, Camp, Patterson, Ruyle and Neer discussed the paper.—J. L. ORMSBEE, M. D., Secretary.

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## HARRISON COUNTY MEDICAL SOCIETY.

The Harrison County Medical Society held its regular quarterly meeting at Bethany, April 21st. A call had been issued for a meeting to be held January 21st, but there was no attendance as the doctors were all quite busy. This last meeting, however, made up for the loss of the other by the interest displayed, although the attendance was small. There were present Drs. Vandivert, Broyles, Guinn, Eades, Cavanaugh, Wiley and Morroway.

Dr. Eades read a paper on "Treatment Following Abortion." The paper was well prepared and full of interesting points for discussion. The author commended the sharp currette, although latitude enough was given wherein the cases and circumstances governed its use, and warned

against being an extremist. In the discussion Dr. Vandivert brought out the point that in these cases the cervix should be always patent; if it was not, it should be dilated sufficiently to allow of drainage.

Dr. Guinn presented a case of erysipelas involving the tissues surrounding the left eye, causing serious disturbances within the eye itself. This was a case in which the treatment was unanimously agreed upon.

Dr. Eades presented some specimens of tumors which, while resembling a cystic form, proved to be adenofibromas.

Dr. Wiley made some remarks in regard to "Pregnancy, Abortion and Race Suicide," which were well received.

Dr. Vandivert spoke of the success of using antistreptococcic serum in two cases of cerebrospinal meningitis; further observation is required and the doctor will be asked to prepare a paper on this subject.

Attention was called to the work of Dr. Simon Flexner and the report in the *Jour. of the A. M. A.* Of all meetings, these round table talks, this exchange of ideas at short range, have been particularly impressive.

A letter was read from the Bureau of Medical Legislation, showing the trend of thought and activity of the doctors all over the land, and particularly as to the engaging in politics. A resolution was then introduced by Dr. Vandivert that we pledge ourselves to support politically those who were favorable, not to "medical trustism," but to a fair and just arrangement of medical matters, not through selfish motives, but as right and justice demand. This was heartily agreed to.

Arrangements will be made for the next meeting, which it was decided should be a public meeting, in the park at Ridgeway, on the last Tuesday in June. A program will be prepared for this special meeting with the view of interesting the public. Upon completion of the program a copy will be forwarded for publication in the official organ of the Association to show what may be done and to serve as a stimulus to other societies.—James H. Morroway, M. D., Secretary.

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## HOLT COUNTY MEDICAL SOCIETY.

The Holt County Medical Society met at Forest City April 2nd. Papers were read by Dr. J. M. Tracy and C. L. Evans. Dr. Tracy's paper was on "The Use of the Obstetrical Forceps," and the paper by Dr. Evans was entitled "For the Good of the Profession."

Action was taken on the resolution that we change our time of meeting from every three months to every two months and in future our regular meetings are to be held on the first Thursday in January, March, May, July, September and November.

The members in attendance were entertained at the hotel by the resident physicians, Drs. Chandler and Bullock.

The next meeting will be at Langdon on the first Thursday in June.—J. F. Chandler, M. D., Secretary.

## PIKE COUNTY MEDICAL SOCIETY.

The Pike County Medical Society met in Bowling Green on April 6th, with the following members present: Drs. Pearson, Pollard, Doris, Walton, Smith, Dreyfus, Biggs, Guy, Hereford and District Councilor W. B. Dorsett of St. Louis.

Dr. Walters read a paper on "The Business Side of a Physician's Life." A spirited discussion of the paper ensued in which every member present participated. The consensus of opinion seemed to be that fees charged for medical services were too low in Pike county and that something ought to be done shortly to better this condition of affairs.

The next meeting will take place in Clarksville May 4th. The following program has been prepared: Puerperal Fever, by Dr. J. E. Bankhead; Abortion, by Dr. Hereford; Nephritis, by Dr. Guy; Anaemia, by Dr. Fred May; Cystitis, by Dr. Pearson; Grip, by Dr. Hetherlin; Dislocations, by Dr. Edgell.

Dr. J. W. Dreyfus, of Louisiana, was elected a delegate to the meeting of the State Association with Dr. M. O. Biggs, of Bowling Green, as alternate.

Drs. R. Shotwell and H. C. Gibbs, of Curryville, were proposed for membership.—R. GRAHAM HEREFORD, M. D., Secretary.

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## SCHUYLER COUNTY MEDICAL SOCIETY.

There was a meeting of Schuyler County Medical Society April 9th, in Lancaster. On account of the bad weather the attendance was small, so we adjourned to meet May 5th, when we will elect our new officers. Dr. J. B. Bridges, of Downing, was appointed delegate to attend State meeting and Dr. J. T. Jones, of Queen City, was appointed alternate.—H. E. GERWIG, M. D., Secretary.

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## SCOTT COUNTY MEDICAL SOCIETY.

The Scott County Medical Society met at Benton April 6th. Members present, Drs. T. F. Frazer, T. R. Frazer, G. S. Cannon, S. J. Wade, J. A. Cline, T. E. Tomlinson, P. S. Tate, W. S. Hutton.

Dr. T. F. Frazer reported a case of retained placenta following miscarriage, which was very interesting and called forth considerable discussion.

Report of committee on by-laws was deferred until the next meeting.

Dr. Mayfield, of Illmo, was elected a member.

The next meeting will be at Commerce on the first Monday in July.—W. S. HUTTON, M. D., Secretary.

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## SHELBY COUNTY MEDICAL SOCIETY.

The Shelby County Medical Society met in Shelbina March 26th. Dr. White read an interesting paper on "Hysteria as a Disease," which

brought out a good discussion by all present. Cases were reported by Drs. Vaughn, Carson, Chapman and Owen.

Resolutions were passed asking Congressman Lloyd to use his influence toward granting pensions to the widows of Drs. Walter Reed and Jesse Lazear.

The election of officers resulted as follows: President, Henry M. Pollard, Shelbina; vice-president, W. W. Owen, Shelbina; secretary and treasurer, A. M. Wood, Lentner; censor, D. E. Singleton, Shelbina; delegate, William Carson, Shelbyville.

Adjourned to meet in Shelbyville at call of the president.—A. M. Wood, M. D., Reporter.

## STE. GENEVIEVE COUNTY MEDICAL SOCIETY.

The Ste. Genevieve County Medical Society held its regular monthly meeting April 8th. There were present Drs. Hinch, Rutledge, Wilkins and Lanning.

Dr. Wilkins read a paper on "The Necessary Knowledge of Anatomy and Physiology Required in Making a Physical Examination of the Heart," which was much appreciated by those present.

Dr. G. M. Rutledge was elected delegate to the Springfield convention.

The next meeting will be held on the second Wednesday in May at 7:30 p. m.—R. W. Lanning, M. D., Secretary.

## ST. JOSEPH-BUCHANAN COUNTY MEDICAL SOCIETY.

REGULAR MEETING, FEBRUARY 12.

The secretary presented a report from the Antituberculosis Committee, stating that the public meeting held in the Y. M. C. A. auditorium in January was well attended, and the lecture by Dr. Porter very interesting.

Dr. Fred H. Ladd was unanimously elected to membership in the society.

Dr. J. K. P. Bowen presented a paper on the "Method of Examination of Eye Cases," which was discussed by Drs. Leonard, Fulkerson, Kenney, Renaud.

Dr. S. F. Carpenter reported two cases of hemorrhage of the stomach, with recovery, hot water treatment being employed.

Dr. P. I. Leonard called attention to some features of the proposed new city charter, in which the salary of the city physician is placed at $1,500 per year, and asked the coöperation of the society. After considerable discussion, and some reference to the necessity of a new city hospital, a resolution was introduced by Dr. Wallace, asking that a committee be appointed to draft resolutions and present to the society at the next meeting. Adopted.

The chair appointed Drs. Jacob Geiger, Renaud and Ferguson.

Dr. Wallace offered a motion to bar the newspaper reporters from the sessions of the society, which was duly seconded. After some discussion both for and against the motion, Dr. Jacob Geiger offered an amendment to the effect that the reporter be admitted to the meeting, but that his reports be subject to the censorship of the secretary of the society. Carried.

Upon motion of Dr. French, "Osteomyelitis" was chosen as the subject for discussion at the next meeting, and the chair appointed Dr. Deffenbaugh to open same.

### REGULAR MEETING, FEBRUARY 28.

The Committee on Resolutions presented its report, favoring a salary of $2,000 per annum for the City Physician, who is to spend four hours per day in the office provided for him. He is to be a regular practitioner of medicine, with not less than three years' experience in the city. The committee also strongly recommended the building and equipping of a city hospital, commensurate with the demands of a city the size of St. Joseph.

A motion to adopt the resolution, and send copies to the city council, was duly seconded, and the subject opened for discussion.

Among those who spoke in favor of the resolution, especially in its bearing upon the building of a new city hospital, were Drs. Jacob Geiger, O. B. Campbell, C. R. Woodson, O. G. Gleaves, Fassett, McCoy, Elam, Ferguson and Kenney. Dr. Potter opposed the resolution, and said the expense of caring for the city's poor was greatly minimized by the present method. Dr. Holley presented a report for 1906, showing that the average expense for city patients was $225 per month.

Upon vote, the resolution was unanimously adopted.

Upon motion of the secretary, committee on resolutions was retained as a committee on City Hospital, consisting of Dr. Jacob Geiger, J. W. Ferguson, E. C. Renaud.

The application of Dr. E. H. Bullock was read and referred to the Board of Censors.

Dr. Kenney introduced a resolution providing for a committee of five whose duty it shall be to investigate the various training schools for nurses in this city and report. Adopted.

The chair appointed Drs. Kenney, Ladd, M. S. Gray, O. B. Campbell, Elam.

Dr. Campbell presented a report of a case of pseudomyxoma peritonei.

### REGULAR MEETING, MARCH 11.

In the absence of Dr. McCoy, the discussion on typhoid fever was opened by Dr. T. H. Doyle, who presented an outline of the etiology and symptomatology. He was followed by Dr. L. C. Bauman, with a paper on "Diagnosis and Treatment." The subject was discussed by Drs. Kenney, Campbell, Gray, Bowen, Todd, Toothaker, Charles Geiger, Carpenter.

Dr. W. T. Elam presented a case of nephrolithiasis with specimen, which was examined by the members.

REGULAR MEETING, MARCH 25.

"Smallpox" was the topic of the evening, and the discussion was opened by Dr. Toothaker, who presented a comprehensive paper on the etiology, symptomatology and modes of infection.

He was followed by Dr. E. S. Ballard, assistant city physician, who carefully outlined the diagnostic features of the disease, and brought out some salient points in differentiation. The doctor also called attention to the difficulties experienced in maintaining quarantine, expressing himself as strongly in favor of compulsory vaccination, if possible. He believes that if vaccination were made general in the large factories and packing-houses there would be an immense saving in the expense of quarantine, to say nothing of the saving of time on the part of employes who, not being vaccinated, contract the disease.

The discussion following was participated in by Drs. P. I. Leonard, Carpenter, Stamey, Potter, Elam, T. H. Doyle, Thomas, Walker, Ballard and Gray.

The subject of quarantine was then discussed, and Dr. Kenney offered a motion that the society go on record as being in favor of abolishing quarantine in smallpox. Seconded. The motion was lost.

Dr. Elam offered a motion in favor of compulsory vaccination, which was amended by Dr. Stamey to the effect that the society favors and strongly urges general vaccination in the schools, packing-houses and factories, and among all persons not immune. Seconded and carried.

Dr. Kenney moved to appoint a committee to draft a resolution in favor of abolishing quarantine in the state, to be presented to the State Society, the committee to report at next meeting. Amended by substituting the Committee on Public Health and Legislation. Seconded and carried.

Upon motion, the hour for opening the sessions of the society was changed from 8 to 8:30 p. m.

Osteomyelitis was chosen for discussion at the next meeting, to be opened by Dr. Deffenbaugh.—CHAS. WOOD FASSETT, M. D., Secretary.

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## ST. LOUIS MEDICAL SOCIETY.

MEETING OF APRIL 4TH.

The scientific program for the evening included the following papers: "The Present Status of Gastric Surgery," Dr. N. B. Carson; "Gastric Surgery from the Internist's Point of View," Dr. W. E. Fischel; "The Roentgen Ray in Gastric Diagnosis," Dr. H. W. Soper.

Drs. Carson and Fischel were not present. Dr. Soper's paper described, in an interesting manner, the progress made in the use of the x ray as a means of diagnosing gastric conditions. The extreme value of this method was made quite apparent by charts and drawings showing

the alterations from the normal view of the stomach when that organ is the seat of certain diseased conditions. The subject was discussed by a number of the members, all of whom expressed the opinion that the x ray was an instrument of the greatest value in diagnosis, when used by experienced persons under proper care and restrictions.

### MEETING OF APRIL 18TH.

Dr. E. W. Saunders read a paper on "Serum Disease, as a Clinical Manifestation of Anaphylaxis" and Dr. R. L. Thompson discussed the "General Consideration of Serum Anaphylaxis." Dr. Thompson exhibited a number of rabbits to emphasize points in his paper.

Dr. Saunders recited the symptoms which follow in about thirty per cent. of persons who receive the first dose of horse serum. Even when no symptoms follow the primary injection the body is profoundly influenced and the condition of anaphylaxis, or supersensibility, appears. If a second injection is given the symptoms of serum disease appear immediately and usually with increased violence. Since this supersensibility may persist for many years the clinician should remember that horse serum should not be used carelessly or indiscriminately.

The phenomena of serum disease is not necessarily synchronous with anaphylaxis. A large dose of serum delays the appearance of anaphylaxis but does not prevent it. Clinically, it seems very probable that the general bacterial resistance is diminished during the stage of the serum disease. In view of the phenomena of anaphylaxis, injections of antitoxin merely on suspicion should not be encouraged. Immunizing injections of the serum should not be employed when isolation will prevent the disease with a reasonable degree of certainty. The use of bactericidal sera of doubtful value should not be employed without careful consideration of the possible benefits and the bad effects of serum disease and anaphylaxis.

In the discussion Dr. Zahorsky called attention to the fact that Dr. Saunders recognized the phenomena of anaphylaxis two years before Bichat and Arrthus made their epoch-making experiments.

# Official Roster
# Missouri State Medical Association

ORGANIZED 1849—RE-ORGANIZED 1867

## Members of Affiliated County Societies

### ADAIR COUNTY.

Barnes, F. M., Brashear, Mo.
Bulkley, J. F., La Platta, Mo.
Callison, E. C., Kirksville, Mo.
Davis, I. L., Connelsville, Mo.
Gashwiler, J. S., Novinger, Mo.
Grim, E. A., Kirksville, Mo.
Grim, E. C., Kirksville, Mo.
Hall, W. S., Novinger, Mo.
Hanks, James, Brashear, Mo.
Martin, J. W., Kirksville, Mo.
Martin, W. W., Sperry, Mo.
McCambridge, Patrick H., Adair, Mo.
McConnell, J. L., Connelsville, Mo.
Munn, W. E., Pure Air, Mo.
Noe, Lafayette, Connelsville, Mo.
Nunn, J. C., Novinger, Mo.
Quinn, E. S., Kirksville, Mo.

### ANDREW COUNTY.

Bennett, E. C., Bolckow, Mo.
Best, W. W., Bolckow, Mo.
Bever, S. S., Amazonia, Mo.
Carpenter, E. H., Helena, Mo.
Damour, F., Bolckow, Mo.
Danley, W. E., Avenue City, Mo.
Hushor, J. C., Rosendale, Mo.
Jeffries, C. O., Savannah, Mo.
Laney, R. L., Avenue City, Mo.
Martin, W., Savannah, Mo.
Miles, B. E., Fillmore, Mo.
Parks, D. C., Fillmore, Mo.
Sutherland, J. C., Savannah, Mo.

### ATCHISON COUNTY.

Chamberlain, G. W. E., Rockport, Mo.
Chamberlain, O. M. C., Rockport, Mo.
Hedgpeth, J. H., Rockport, Mo.
Holliday, J. A., Tarkio, Mo.
Hunter, James A., Fairfax, Mo.
Hunter, O. A., Fairfax, Mo.
Lewis, E. A., Rockport, Mo.
Lott, G. W., Westboro, Mo.
McMichael A., Rockport, Mo.
Postlewaite, J. A., Tarkio, Mo.
Safford, W. G., Tarkio, Mo.
Settles, C. F., Rockport, Mo.
Strickland, W. R., Rockport, Mo.
Taylor, E. P., Fairfax, Mo.
Waugh, C. M., Tarkio, Mo.
Whitford, E. P., Westboro, Mo.

### AUDRAIN COUNTY.

Alford, R. Lee, Vandalia, Mo.
Berry, W. R., Mexico, Mo.
Carnett, W. E., Worcester, Mo.
Cave, E. S., Mexico, Mo.
Coil, P. E., Mexico, Mo.
Cooper, J. Q., Rowena, Mo.
Crawford, M. E., Mexico, Mo.
Douglass, W. H., Benton City, Mo.
Flint, J. F., Molino, Mo.
Gibbs, R. T., Mexico, Mo.
Griffin, Fred, Mexico, Mo.
Lofton, E. A., Laddonia, Mo.
McCall, W. K., Worcester, Mo.
McFarland, W. W., Mexico, Mo.
Moore, Joe, Mexico, Mo.
Parrish, J. C., Vandalia, Mo.
Rodes, N. R., Mexico, Mo.
Rodes, W. R., Mexico, Mo.
Rothwell, C. A., Mexico, Mo.
Strode, R. O., Mexico, Mo.
Toalson, G. F., Mexico, Mo.

### BARRY COUNTY.

Bailey, W. T., Cassville, Mo.
Chandler, S. W., Cassville, Mo.
Dusenberry, C. T., Monett, Mo.
Hagler, M. C., Monett, Mo.
Hawkins, A. S., Monett, Mo.
Horton, W. H., Purdy, Mo.
Jones, Alva, Monett, Mo.
Leith, L. R., Butterfield, Mo.
Miller, D. E., Monett, Mo.
Mitchell, D. L., Cassville, Mo.
Mitchell, John, Purdy, Mo.
Newman, S. A., Cassville, Mo.
Northcutt, Geo. J., Seligman, Mo.
Northcutt, L. B., Washburn, Mo.
Pound, J. B., Shell Knob, Mo.
Russell, J. M., Monett, Mo.
Searcy, W. B., Exeter, Mo.
Trumbower, M. R., Monett, Mo.
West, W. M., Monett, Mo.

### BARTON COUNTY.

Allee, G. D., Lamar, Mo.
Brooks, J. M., Golden City, Mo.
Brown, C. F., Lamar, Mo.
Coleman, W. O., Nashville, Mo.
Duckett, T. H., Milford, Mo.
Gish, G. J. P., Minden Mines, Mo.
Griffin, W. L., Lamar, Mo.
Locker, G. E., Iantha, Mo.
McCombs, J. L., Lamar, Mo.
McKelvey, W. A., Minden Mines, Mo.
Stone, A. B., Lamar, Mo.
Van Meter, A., Lamar, Mo.

### BATES COUNTY.

Agnell, Maude, Rich Hill, Mo.
Allen, W. H., Rich Hill, Mo.
Boulware, T. C., Butler, Mo.
Chastain, E. N. Butler, Mo.
Compton, U. J., Pleasant Gap, Mo.
Delameter, G. A., Rich Hill, Mo.
Foster, T. W., Butler, Mo.
Gilmore, E. E., Adrian, Mo.
Hulett, R. F., Rich Hill, Mo.
Lancaster, H. W., Nevada, Mo.
Lane, G. G., Rich Hill, Mo.

Lockwood, T. D., Butler, Mo.
Lyle, A. E., Butler, Mo.
Martin, J. R., Merwin, Mo.
Miller, Sherman, Urich, Mo.
Powers, C. E., Amoret, Mo.
Robinson, E. E., Adrian, Mo.
Rhodes, H. A., Foster, Mo.
Sparr, E. E., Amsterdam, Mo.
Whipple, N. L., Pleasant Gap, Mo.
Williams, J. H., Hume, Mo.
Williams, W. A., Hume, Mo.
Zey, E. J., Butler, Mo.

BENTON COUNTY.

Clark, J. W., Fristoe, Mo.
Curl, C. A., Cross Timbers, Mo.
Dick, M., Colecamp, Mo.
Dillon, M., Fairfield, Mo.
Greeson, G. A., Lincoln, Mo.
Holtzen, E. E., Colecamp, Mo.
Jones, W. G., Lincoln, Mo.
Pomeroy, R. L., Warsaw, Mo.
Rhodes, E. L., Lincoln, Mo.
Savage, H. G., Warsaw, Mo.
Schwald, N. A., Colecamp, Mo.
Stratton, S. O., Edmonson, Mo.
Smith, J. R., Warsaw, Mo.
Walton, J. H., Ionia, Mo.

BOONE COUNTY.

Angell, W. E., Rocheport, Mo.
Austin, R. S., Hallsville, Mo.
Belden, W. E., Columbia, Mo.
Calvert, J. W., Columbia, Mo.
Chinn, E. H., Rocheport, Mo.
Gentry, E. N., Sturgeon, Mo.
Gordon, James, Columbia, Mo.
Hulen, J. C., Centralia, Mo.
Hickerson, J. T., Centralia, Mo.
Jackson, C. M., Columbia, Mo.
Kampschmidt, A. W., Columbia, Mo.
Keith, J. F., Sturgeon, Mo.
Lewis, M. D., Columbia, Mo.
McAlester, A. W., Columbia, Mo.
McCallister, W. A., Centralia, Mo.
McComas, A. R., Sturgeon, Mo.
Meyer, M. W., Columbia, Mo.
Miller, Walter McN., Columbia, Mo.
Moss, Woodson, Columbia, Mo.
Nifong, F. G., Columbia, Mo.
Norris, W. A., Columbia, Mo.
Noyes, G. L., Columbia, Mo.
Robinson, R. R., Hallsville, Mo.
Robinson, W. A., Sturgeon, Mo.
Schorer, E. H., Columbia, Mo.
Thornton, J. E., Columbia, Mo.
Wallace, E. J., Centralia, Mo.
Wren, J. A., Woodlandville, Mo.

BUCHANAN COUNTY.

(All addresses St. Joseph, Mo., unless otherwise stated.)

Bandall, O. A., 2004 St. Joseph Ave.
Bansbach, J. J., 823 Fred. Ave.
Ballard, E. S., King Hill Bldg.
Bauman, L. C., 4th & Edmond.
Bell, J. M., 213 N. 7th St.
Bode, L. F., 520 S. 6th St.
Bowen, J. K. P., 805 Francis.
Bullock, E. H., Bank of Commerce Bldg.
Byrne, J. I., Bank of Commerce Bldg.
Campbell, O. B., Hughes Bldg.
Carpenter, S. F., Hughes Bldg.
Dandurant, L. J., 8th & Felix.
Davis, E. C., 1409 S. 11th St.
Deffenbaugh, W. B., 710 Felix St.
Donelan, E. A., 1307 Dewey Ave.
Dowell, Robt. F., Agency, Mo.
Doyle, J. M., 107 N. 9th St.
Doyle, T. H., 107 N. 9th St.
Dunsmore, J. M., 9th & Charles St.
Elam, W. T., Logan Block.
Farber, M. J., 6th & Edmond.
Fassett, Chas. Wood, Krug Park Pl.
Ferguson, J. W., 710 Felix St.
Forgrave, H. S., King Hill Bldg.
Forgrave, L. R., Logan Block.
French, J. A., 408 S. 8th St.
Fulkerson, 6th & Francis St.
Gebhart, O. C., King Hill Bldg.
Geiger, C. G., 613 Francis St.
Geiger, Jacob, 613 Francis St.
Gleaves, O. G., Station B.
Goetze, W. E., 7th & Edmond.
Good, C. A., Logan Block.
Graham, J. K., Logan Block.
Gray, A. L., Logan Block.
Gray, M. S., Logan Block.
Heddens, J. W., 614 Francis St.
Holley, A. E., Rock Island Bldg.
Hull, W. S., Faucett, Mo.
Humfreville, D. L., Pitts Bldg.
Islaub, J. W., 207 S. 14th St.
Kenney, W. L., Commercial Bldg.
Kessler, S. F., 614 Francis St.
Ladd, Fred A., Bank of Commerce Bldg.
Lau, G. A., 820 Edmond.
Lee, Herbert, Inza, Mo.
Leonard, P. I., 613 Francis St.
Long, L. S., 820 Edmond St.
McCoy, J. H., 710 Felix St.
McGill, W. J., King Hill Bldg.
McGlothlin, A. B., 720 Francis St.
Minton, W. H., King Hill Bldg.
Morton, Daniel, King Hill Bldg.
Morrison, W. S., Rushville, Mo.
Osborn, J. F., 2402 S. 17th St.
Owens, J. F., Ballinger Bldg.
Patterson, Frederick A., 205 Hughes Bldg.
Paul, T. M., 825 Fred. Ave.
Paulette, A. W., Ballinger Bldg.
Pitts, Barton, Pitts Bldg.
Potter, T. E., 7th & Edmond St.
Redmond, Thos., 807 Francis St.
Reynolds, J. B., 417 Francis St.
Richardson, W. H., 10th & Felix St.
Sampson, Chris. M., 115 N. 5th St.
Sampson, J. H., 115 N. 5th St.
Schmid, W. F., Pitts Bldg.
Senn, Geo., 220 N. 9th St.
Smith, J. C., Hosp. No. 2.
Spencer, F. H., Box 903.
Stamey, J. Thomas, 2624 St. Joe Ave.
Thomas, C. E., Commercial Bldg.
Thompson, G. R., Hosp. No. 2.
Timerman, A. R., 4101½ Illinois Ave.
Todd, L. A., 8th & Jule.
Toothaker, B. W., Hughes Bldg.
Walker, H. L., 926 N. 3rd St.
Wallace, C. H., 8th & Jule.
Willman, R., 301 N. 11th St.
Woodson, C. R., 220 N. 7th St.

BUTLER COUNTY.

Cadwell, Victor, Poplar Bluff, Mo.
Crump, A., Batesville, Mo.
Kendall, W. A., Poplar Bluff, Mo.
Mott, J. W., Poplar Bluff, Mo.
Rowe, A. R., Poplar Bluff, Mo.
Seybold, I. W., Poplar Bluff, Mo.
Taylor, W. F. S., Poplar Bluff, Mo.
Tranbitz, A., Neelysville, Mo.
Williamson, C. W., Poplar Bluff, Mo.

CALDWELL COUNTY.

Alpin, W. H., Hamilton, Mo.
Brown, Tinsley, Hamilton, Mo.
Carr, B. F., Polo, Mo.
Cowley, G. B., Cowgill, Mo.
DaLameter, H., Stet, Mo.
Dewey, C. O., Breckenridge, Mo.
Dowell, G. S., Braymer, Mo.
Duffie, W. M., Hamilton, Mo.
Dwight, K. M., Hamilton, Mo.
Eads, L. J., Hamilton, Mo.
Gartside, J. E., Kingston, Mo.
Goins, G. W., Breckenridge, Mo.
Hudson, J. W., Oregon, Mo.
Leeper, C. C., Braymer, Mo.
Lindley, W. T., Hamilton, Mo.
McConkey, C. M., Lathrop, Mo.
McMurtrey, T. C., Kidder, Mo.
Mount, R. L., Polo, Mo.
Scanlon, T. W., Polo, Mo.
Schroeder, H. A., Braymer, Mo.
Shouse, W. S., Kingston, Mo.

Smith, S. D., Cowgill, Mo.
Tiffin, Clayton, Hamilton, Mo.
Waterman, J. A., Breckenridge, Mo.
Watson, R. H., Hamilton, Mo.
Wilhelm, D. E., Rialto Bldg., Kansas City, Mo.
Wilkerson, J. O., Cowgill, Mo.
Woolsey, C. B., Braymer, Mo.
Woolsey, C. L., Braymer, Mo.

CALLAWAY COUNTY.

Baker, N. F., Fulton, Mo.
Bridges, A. D., Portland, Mo.
Christian, C. H., New Bloomfield, Mo.
Crews, R. M., Williamsburg, Mo.
Davis, J. R., Mokane, Mo.
Evans, E. E., Fulton, Mo.
Gilman, D. C., Portland, Mo.
Harrison, J. F., Farmington, Mo.
Lewis, C. W., Fulton, Mo.
McCall, G. D., Fulton, Mo.
Owen, H. L., Fulton, Mo.
Payne, W. O., Fulton, Mo.
Williams, P. E., Fulton, Mo.
Williamson, W. H., Mokane, Mo.
Yates, Martin, Fulton, Mo.
Young, D. H., Fulton, Mo.

CAPE GIRARDEAU COUNTY.

Atkins, R. F., Jackson, Mo.
Chandler, J. J., Lutesville, Mo.
Costner, N. F., Dutchtown, Mo.
Cunningham, H. L., Cape Girardeau, Mo.
Dalton, A. E., Friedheim, Mo.
Dalton, R. P., Cape, Girardeau, Mo.
Hayes, B. W., Jackson, Mo.
Henderson, R. T., Jackson, Mo.
Higdon, E. E., Allenville, Mo.
Hope, D. H., Cape Girardeau, Mo.
Howard, W. N., Cape Girardeau, Mo.
Porterfield, J. D. Jr., Cape Girardeau, Mo.
Rosenthal, M., Cape Girardeau, Mo.
Sander, C. A., Marbie Hill, Mo.
Schulz, G. B., Cape Girardeau, Mo.
Statler, W. K., Oak Ridge, Mo.
Tarlton, G. W., Cape Girardeau, Mo.
Vinyard, G. W., Jackson, Mo.
Walker, G. W., Cape Girardeau, Mo.
Wichterich, R. F., Cape Girardeau, Mo.
Wilson, E. H. G., Cape Girardeau, Mo.
Witmer, C. M., Marble Hill, Mo.
Yount, W. E., Cape Girardeau, Mo.

CARROLL COUNTY.

Avery, T. W., DeWitt, Mo.
Baird, W. C., Bogard, Mo.
Boggs, J. D., Norborne, Mo.
Cook, R. F., Carrollton, Mo.
Cooper, J. C., Carrollton, Mo.
Highsmith, Geo. R., Carrollton, Mo.
Lee, B. J., Norborne, Mo.
Logan, J. P., DeWitt, Mo.
Miller, R. M., Bogard, Mo.
Musson, E. H., Norborne, Mo.
Samuels, L., Carrollton, Mo.
Spencer, N. A., DeWitt, Mo.
Tull, H. W., Carrollton, Mo.

CARTER-SHANNON COUNTY.

Andrews, Geo. D., Grandin, Mo.
Chilton, J. A., Van Buren, Mo.
Cotton, T. W., Van Buren, Mo.
Fulton, William, Winona, Mo.
Gum, P. D., Birchtree, Mo.
Johnston, Alexander, Grandin, Mo.

CASS COUNTY.

Adair, T. W., Archie, Mo.
Anderson, C. M., Pleasant Hill, Mo.
Ballieft, M. R., Pleasant Hill, Mo.
Barrett, W. H., Harrisonville, Mo.
Beckman, W. S., Strasburg, Mo.
Brierley, H. A., Peculiar, Mo.
Chaffin, W. F., Raymore, Mo.
Clemens, W. M., Cleveland, Mo.
Crawford, H. S., Harrisonville, Mo.
Elder, A. R., Harrisonville, Mo.
Ellis, Frank B., Garden City, Mo.
Farnsworth, A. D., Drexel, Mo.
Farrow, G. W., East Lynne, Mo.
Foster, F. W., East Lynne, Mo.
Garrison, W. H., Eightmile, Mo.
Grant, H. M., Pleasant Hill, Mo.
Griffith, David, Creighton, Mo.
Jerard, H., Pleasant Hill, Mo.
Keller, R. G., Freeman, Mo.
Overholser, M. B., Harrisonville, Mo.
Prentiss, H. S., Pleasant Hill, Mo.
Ramey, R. D., Garden City, Mo.
Rhodes, M. K., Austin, Mo.
Schoor, E., Garden City, Mo.
Triplett, J. S., Harrisonville, Mo.
Yeagle, R. P., Pleasant Hill, Mo.

CEDAR COUNTY.

Crawford, R. O., El Dorado Springs, Mo.
Dawson, J. W., El Dorado Springs, Mo.
Dunnaway, L. T., Clappinger Mills, Mo.
Edgar, C. A., El Dorado Springs, Mo.
Hill, K., El Dorado Springs, Mo.
Liston, E. H., Balm, Mo.
Marr, R. B., Filley, Mo.

CHARITON COUNTY.

Austin, M. B., Brunswick, Mo.
Baker, J. H. P., Salisbury, Mo.
Baker, W. L., Salisbury, Mo.
Billeter, W. J., Bynumville, Mo.
Brummall, J. D., Salisbury, Mo.
Edwards, G. W., Brunswick, Mo.
Epperly, R. G., Prairie Hill, Mo.
Gaines, J. R., Mussell Fork, Mo.
Hardy, J. W., Sumner, Mo.
Hawkins, G. W., Triplett, Mo.
Hughes, B., Keytesville, Mo.
Jennings, C. A., Salisbury, Mo.
Kirkpatrick, H. E., Dalton, Mo.
Knott, Isaiah, Keytesville, Mo.
Lewis, A. L., Sumner, Mo.
McAdams, J. D., Prairie Hill, Mo.
McEuen, Oliver, Salisbury, Mo.
Tatum, Harry, Brunswick, Mo.
Temple, C. H., Rockford, Mo.
Todd, W. T., R F. D., Centralia, Mo.
Wallace, J. S., Brunswick, Mo.
Welch, J. F., Salisbury, Mo.
Zilman, A. W., Indian Grove, Mo.

CHRISTIAN COUNTY.

Brown, F. W., Billings, Mo.
Bruton, J. W., Ozark, Mo.
Farthing, R. R., Sparta, Mo.
Nagle, P. E., Billings, Mo.
Robertson, J. A., Ozark, Mo.
Smith, W. L., Sparta, Mo.
Young, J. C., Ozark, Mo.

CLARK COUNTY.

Bridges, J. R., Kahoka, Mo.
Callihan, R. G., Luray, Mo.
Hiller, Frank B., Kahoka, Mo.
Martin, W. H., Kahoka, Mo.
Sisson, W. B., Kahoka, Mo.
Teel, A. W., Kahoka, Mo.

COLE COUNTY.

Aldridge, M. R., Jefferson City, Mo.
Bedford, S. V., Jefferson City, Mo.
Biesmeyer, L. F., Westphalia, Mo.
Bowls, S. A., Linn, Mo.
Chastain, C. W., Jefferson City, Mo.
Clark, W. A., Jefferson City, Mo.
Enloe, C. P., Jefferson City, Mo.
Ettmueller, G., Jefferson City, Mo.
Gove, Herman T., Linn, Mo.
Hill, J. A., Jefferson City, Mo.
Hough, C. P., Jefferson City, Mo.
Leach, N. T., Elston, Mo.
Martin, J. B., Russelville, Mo.

Norwood, W. W., Russelville, Mo.
Porth, J. P., Jefferson City, Mo.
Richoff, A. H., Chamois, Mo.
Son, E. R., Osage City, Mo.
Sneed, C. M., Jefferson City, Mo.
Thorpe, J. L., Jefferson City, Mo.

COOPER COUNTY.

Barnes, H. T., Pilot Grove, Mo.
Barnes, W. S., Pilot Grove, Mo.
Cordry, H. V., Boonville, Mo.
Elliott, W. H., Bunceton, Mo.
Evans, R. L., Boonville, Mo.
Fogel, R. L., Clifton City, Mo.
Lionberger, John R. Boonville, Mo.
Meredith, A. L., Woolridge, Mo.
Monroe, A. E., Otterville, Mo.
Nelson, A. W. B., Bunceton, Mo.
Parrish, J. S., Pleasant Green, Mo.
Pendleton, Thomas O., Pilot Grove, Mo.
Quigg, H. D., Blackwater, Mo.
Smiley, F. R., Boonville, Mo.
Teel, S. M., Prairie Home, Mo.
Van Ravenswaay, C. H., Boonville, Mo.

DAVIESS COUNTY.

Bickel, James T., Winston, Mo.
Brosius, Wm. L., Gallatin, Mo.
Minnick, A. G., Lock Spring, Mo.
Smith, M. A., Gallatin, Mo.
Thompson, O. N., Lock Spring, Mo.
Waller, C. E., Altamont, Mo.
Wetzel, N. M., Jameson, Mo.

DEKALB COUNTY.

Clark, W. J., Maysville, Mo.
Evans, R. A., Amity, Mo.
Gale, W. S., Osborn, Mo.
Guinn, J. C., Clarksdale, Mo.
Kimberlin, J. E., Union Star, Mo.
Lee, L. E., Weatherby, Mo.
Reynolds, E. M., Union Star, Mo.
Richey, L. A., Fairport, Mo.
Saunders, L. E. Stewartsville, Mo.
Stroup, E. R., Weatherby, Mo.
Yeater, H. P., Maysville, Mo.

DENT COUNTY.

Arthur, S. F., Lecoma, Mo.
Calhoun, D. S., Sligo, Mo.
Conoway, R. H., Mounce, Mo.
Cummings, W. P., Salem, Mo.
Duncan, E. A., Salem, Mo.
Gordon, J. B., Gila, Mo.
Lenox, W. M., Hobson, Mo.
McMurtrey, A. T., Salem, Mo.
Rudd, W. E., Salem, Mo.
Welch, J. C., Salem, Mo.

FRANKLIN COUNTY.

Booth, H. A., Pacific, Mo.
Brown, A. C., Moselle, Mo.
Briegleb, Chas. F., St. Clair, Mo.
Dunnigan, J. P., Sullivan, Mo.
Elmbeck, A. F., New Haven, Mo.
Elmbeck, Wm. F., New Haven, Mo.
Fitzgerald, W. P., Gerald, Mo.
Hempker, W. H., Catawissa, Mo.
Hume, E. L., Bourbon, Mo.
Isbell, John, Washington, Mo.
Kitchell, W. E., St. Clair, Mo.
Lane, A., Sullivan, Mo.
Mankopf, B. E., New Haven, Mo.
May, H. A., Washington, Mo.
McNay, A. L., Pacific, Mo.
Poppenhusen, H. A. C., Washington, Mo.
Reaves, L. W., Japan, Mo.
Rusk, E. McD., Villa Ridge, Mo.
Rusk, John A., Gray's Summit, Mo.
Schudde, O. N., Sullivan, Mo.
Smith, August A., Pacific, Mo.
Snow, A. E., Union, Mo.
Williams, D. E., Lonedell, Mo.

GASCONADE-MARIES-OSAGE COUNTY.

Auf der Heide, Frederick, Drake, Mo.
Burgess, J. W., Belle, Mo.
Byler, W. F., Koeltztown, Mo.
Englebrecht, John, Stonyhill, Mo.
Ferrell, J. J., Owensville, Mo.
Ferrell, W. R., Bland, Mo.
Leach, C. J., Feuersville, Mo.
Neely, J. E., Vancleve, Mo.
Nieweg, J. W., Owensville, Mo.
Radmacher, J. J., Meta, Mo.
Seba, John D., Bland, Mo.
Seba, W. E., Leedy, Okla.
Spurgeon, Marion E., Red Bird, Mo.
Terrill, S. I., Meta, Mo.

GENTRY COUNTY.

Barger, J. U., Darlington, Mo.
Brooks, W. W., Stanberry, Mo.
Conrad, J. W., Albany, Mo.
Crocket, J. A., Stanberry, Mo.
Davis, Benj. Jr., Albany, Mo.
Forbis, C. F., Gara, Mo.
Landis, H. B., King City, Mo.
Lindley, E. R., Stanberry, Mo.
Long, H. L., Berlin, Mo.
Martin, W. T., Albany, Mo.
Smith, Geo. W., Albany, Mo.
Whiteley, G. W., Albany, Mo.

GREENE COUNTY.

Armstrong, A., 305 S. Campbell St., Springfield, Mo.
Barnes, G. W., 200 W. Commercial St., Springfield, Mo.
Bartlett, J. R., 540 E. Commercial St., Springfield, Mo.
Beers, E. G., Springfield, Mo.
Boyd, J. R., Springfield, Mo.
Carter, O. N., Brookline Station, Mo.
Camp, W. A., Springfield, Mo.
Clark, J. W., Bois D'Arc, Mo.
Coffelt, T. A., Springfield, Mo.
Cowen, H. K., Ash Grove, Mo.
Cox, Lee, 223 South St., Springfield, Mo.
Crane, T. V. B., Springfield, Mo.
Dewey, J. E., Springfield, Mo.
Doolin, T., Ash Grove, Mo.
Elkins, E. Bryant, Springfield, Mo.
Evans, E. C., Koshkonong, Mo.
Evans, E. L., Springfield, Mo.
Farnsworth, D. B., Springfield, Mo.
Fortner, B. F., Springfield, Mo.
Fulbright, J. H., Springfield, Mo.
Fulton, C. E., Springfield, Mo.
Hill, H. S., Springfield, Mo.
James, W. C., 445 E. Commercial St., Springfield, Mo.
Kern, U. F., Springfield, Mo.
Knab, E., Springfield, Mo.
McClure, L. E., Walnut Grove, Mo.
Matthews, J. C., Springfield, Mo.
Mayfield, M. H., Springfield, Mo.
Miller, T. C., Ash Grove, Mo.
Moore, C. A., Springfield, Mo.
Neer, C. S., Springfield, Mo.
Nixon, J. H., Springfield, Mo.
Oldham, J. D., Springfield, Mo.
Ormsbee, J. L., Springfield, Mo.
Patterson, W. P., Springfield, Mo.
Peak, O. L., Springfield, Mo.
Perry, J. K., Walnut Grove, Mo.
Pipkin, R. L., Springfield, Mo.
Pursselley, W. L., Springfield, Mo.
Ralston, J. P., Springfield, Mo.
Rienhoff, Wm., Springfield, Mo.
Ross, F. E., Springfield, Mo.
Ruyle, H. J., Springfield, Mo.
Sayers, J. S., Springfield, Mo.
Sherman, D. U., Springfield, Mo.
Smith, W. M., Springfield, Mo.
Tefft, J. E., 103½ E. Square, Springfield, Mo.
Terry, N. F., Springfield, Mo.
Thomas, Earl, Springfield, Mo.
Tickle, S. W., Springfield, Mo.

Williams, J. W., Springfield, Mo.
Williams, N. C., 318½ College St., Springfield, Mo.
Willier, A. F., 1437 Summit Ave., Springfield, Mo.
Woody, C. E., Springfield, Mo.
Wright, J. P., Springfield, Mo.

GRUNDY COUNTY.

Asher, J. A., Trenton, Mo.
Coon, D. W., Trenton, Mo.
Fulkerson, W. D., Trenton, Mo.
Sheldon, S., Trenton, Mo.
Winningham, W. H., Trenton, Mo.
Wright, J. B., Trenton, Mo.

HARRISON COUNTY.

Broyles, F. H., Bethany, Mo.
Bryson, E. H., Bethany, Mo.
Dunkerson, E. B., Hatfield, Mo.
Eades, M. H., New Hampton, Mo.
Gwinn, G. E., Bethany, Mo.
Mitchell, C. A., Blythedale, Mo.
Morroway, J. H., Ridgeway, Mo.
Robertson, C. H., Eagleville, Mo.
Stewart, B. S., Bethany, Mo.
Sutton, B. N., Happy Valley, Mo.
Swint, William, Gilman City, Mo.
Vandivert, A. H., Bethany, Mo.
Wiley, W. H., Ridgeway, Mo.
Williams, A. W., Ridgeway, Mo.

HENRY COUNTY.

Barr, Bernice B., Clinton, Mo.
Beaty, Joseph G., Huntingdale, Mo.
Benway, Wm. H., Deepwater, Mo.
Berry, Geo. W., Montrose, Mo.
Blackmore, Thomas A., Windsor, Mo.
Bradley, Will P., Windsor, Mo.
Britts, John H., Clinton, Mo.
Bronaugh, J. H., Calhoun, Mo.
Derwent, A. E., Clinton, Mo.
Douglass, F. M., Clinton, Mo.
Fewell, R. B., Montrose, Mo.
Gibbins, Wm. H., Clinton, Mo.
Gray, A. A., Calhoun, Mo.
Griffith, C. E., Windsor, Mo.
Haire, Robt. D., Clinton, Mo.
Hampton, J. R., R. F. D. 1, Clinton, Mo.
Head, C. W., Windsor, Mo.
Howard, Corwin F., Deepwater, Mo.
Kunkler, J. E., Clinton, Mo.
McNees, A. Jackson, Clinton, Mo.
Menees, G. W., Clinton, Mo.
Miller, J. M., Montrose, Mo.
Peelor, Edwin C., Coal, Mo.
Poague, S. A., Clinton, Mo.
Russell, J. J., Deepwater, Mo.
Shankland, Wm. M., Clinton, Mo.
Smith, L. L., Urich, Mo.
Streibey, U. G., Brownington, Mo.
Taylor, C. D., Brownington, Mo.
Walker, G. S., Calhoun, Mo.
Wallis, J. R., Clinton, Mo.
Wilson, J. S., Deepwater, Mo.
Woltzen, S. W., Urich, Mo.

HOLT COUNTY.

Bullock, F. E., Forest City, Mo.
Chandler, J. F., Forest City, Mo.
Davis, J. M., Craig, Mo.
Davis, T. O., Maitland, Mo.
Evans, C. L., Oregon, Mo.
Hogan, F. E., Bigelow, Mo.
Kaltenbach, E., Craig, Mo.
Miller, E. E., Craig, Mo.
Miller, E. M., Mound City, Mo.
Miller, R. R., Maitland, Mo.
Proud, W. C., Oregon, Mo.
Quigley, B. T., Mound City, Mo.
Simmons, B. B., Oregon, Mo.
Tracy, J. C., Mound City, Mo.
Tracy, J. M., Mound City, Mo.
Williams, Ira, Maitland, Mo.
Wood, W. S., Oregon, Mo.

HOWARD COUNTY.

Bonham, Vaughn Q., New Franklin, Mo.
Burgwin, A. B., Fayette, Mo.
Champion, J. R., Hillsdale, Mo.
Fleet, J. B., New Franklin, Mo.
Gallemore, G. B., Boonsboro, Mo.
Givens, H. K., Fayette, Mo.
Hume, J. Y., Armstrong, Mo.
Lee, C. H., Fayette, Mo.
Lewis, C. O., Fayette, Mo.
Long, O. M., Harrisburg, Mo.
Megee, C. P., Fayette, Mo.
Richards, T. C., Fayette, Mo.
Smith, N. E., Fayette, Mo.
Thompson, W. S., Armstrong, Mo.
Watts, C. W., Fayette, Mo.
Wright, U. S., Fayete, Mo.
White, M. S., Roanoke, Mo.
Wood, J. T., Harrisburg, Mo.

HOWELL COUNTY.

Bingham, J. W., Pottersville, Mo.
Black, James M., Southfork, Mo.
Culp, J. C., Thayer, Mo.
Davis, J. C. B., Willow Springs, Mo.
Dixon, J. C. B., West Plains, Mo.
Johnson, J. McB., West Plains, Mo.
Mitchell, E. H., Pottersville, Mo.
Nichols, D. J., West Plains, Mo.
Powell, D. T., Thayer, Mo.
Reiley, J. F., West Plains, Mo.
Rowe, H. J., Willow Springs, Mo.
Spears, R. S., West Plains, Mo.
Shuttee, H. C., West Plains, Mo.
Thompson, H. A., Lanton, Mo.
Thornburg, A. H., West Plains, Mo.

IRON COUNTY.

Adams, J. Q., Belleview, Mo.
Farrar, G. W., Ironton, Mo.
Gay, R. T., Ironton, Mo.
Kerlagon, C. C., Belleview, Mo.
Marshall, I. A., Ironton, Mo.
Martin, James, Pilot Knob, Mo.

JACKSON COUNTY.

(All addresses Kansas City, Mo., unless otherwise stated.)

Adams, Noah, 407 Argyle Bldg.
Agin, Burroughs, 2317 College Ave.
Allbritain, J. W., 24th & Holly St.
Anderson, H. C., 716 Shukert Bldg.
Andrews, Vernon Lee, 3745 Wabash Ave.
Armour, W. A., 3401 E. 12th St.
Atkins, Calvin, Independence, Mo.
Ayers, Samuel, 1208 Wyandotte.
Ball, H. P., 203 Rialto Bldg.
Balsley, J. A., Santa Monica, Calif.
Beattie, T. J., 505 Shukert Bldg.
Beedle, Gordon A., 312 Altman Bldg.
Bell, J. W., 311 Argyle Bldg.
Bellows, Geo. E., 429 Rialto Bldg.
Belove, Benj., 500 Shukert Bldg.
Berry, Geo. F., 501 Rialto Bldg.
Binnie, J. F., 302 Argyle Bldg.
Block, Jacob, 419 Argyle Bldg.
Blair, E. G., 404 Bryant Bldg.
Blakesley, T. S., 100 Rialto Bldg.
Boswell, A. C., 2301 Summit St.
Bowman, Dora E., 327 Rialto Bldg.
Brainart, B. F., Martin City, Mo.
Brewster, R. B., 423 Argyle Bldg.
Brown, C. A., 418 Keith & Perry Bldg.
Brown, Ralph, 1304 E. 12th St.
Bruehl, Julius, 436 N. Ridge Bldg.
Brunig, F. H., 310 Altman Bldg.
Burke, C. L., 304 Deardorff Bldg.
Burnett, S. Grover, 3100 Euclid Ave.
Burrill, C. W., 623 Shukert Bldg.
Callahan, Richard, 540 Cambridge Ave.
Campbell, Wm. L., 15th & Jackson.
Cantrell, C. D., 12th & Troost.
Capell, Clarence S., 1107 McGee St.

Carbaugh, Eugene, 430 Rialto Bldg.
Carl, S. T., 350 N. Ridge Bldg.
Carter, J. W., 2407 Jackson Ave.
Carver, H. N., 2805 E. 12th St.
Castelaw, R. E., 13th & Woodworth.
Cathcart, C. P., 419 Deardorff Bldg.
Chambers, J. Q., Shukert Bldg.
Chambliss, E. L., 523 Rialto Bldg.
Child, Scott P., 603 Bryant Bldg.
Clausen, J. J., 424 Deardorff Bldg.
Clayton, Paul B., General Hospital.
Coffey, W. H., 224 Bryant Bldg.
Coffin, G. O., 436 N. Ridge Bldg.
Coleman, H. B., 3105 E. 18th St.
Conover, C. C., 405 Argyle Bldg.
Cordier, A. H., 310 Rialto Bldg.
Crooks, O. R., 334 Rialto Bldg.
Cross, R. O., 317 Rialto Bldg.
Cross, W. M., 3600 Troost Ave.
Crowder, W. H., 304 Altman Bldg.
Crowell, H. C., 429 Rialto Bldg.
Cunningham, O. J., 306 Altman Bldg.
Curdy, R. J., 301 Keith & Perry Bldg.
Curry, E. R., 304 Deardorff Bldg.
Dailey, Forrest W., 415 Argyle Bldg.
Dannaker, C. A., 637 Woodland Ave.
Darling, B. C., Argyle Bldg.
Davis, A. W., 3303 Woodland Ave.
Davis, E. T., 2634 Myrtle.
Davis, G. W., 12th & Central.
Davis, S. J. T., 304 Deardorff Bldg.
Dod, F. L., 4646 Troost Ave.
Donaldson, G. H., 3956 Wyandotte.
Donaldson, J. E., 3940 Broadway.
Dove, O. H., 413 Rialto Bldg.
Drake, N. A., 1001 Harrison St.
Dunham, S. A., 1214 Main St.
Eldridge, J. S., 318 E. 10th St.
Eubank, A. E., 3021 S. W. Blvd.
Evans, F. H., Indp. & Forest Aves.
Faires, C. P., 1300 E. 8th St.
Field, Thomas, 2706 E. 18th St.
Florian, Albert J., 920 Holmes St.
Foster, Hal, 402 Altman Bldg.
Fowlston, John, 405 Argyle Bldg.
Frankenberger, J. M., University Hosp.
Freyman, A. A., 1201 Independence Ave.
Freyman, Jokshan, 1201 Independence Ave.
Froehling, F. W., 920 Holmes St.
Frick, Wm., 409 Rialto Bldg.
Frick, W. J., 415 Keith & Perry Bldg.
Frye, A. G., 2342 Jackson Ave.
Fryer, B. E., 520 E. 9th St.
Fulton, A. L., 429 Deardorff Bldg.
Fulton, C. M., 210 Argyle Bldg.
Gaines, J. W., 406 Rialto Bldg.
Gayle, V. W., 204 Deardorff Bldg.
Gilmor, Wm. L., 533 Arlington St., Mt. Washington, Mo.
Exner, Max J., 610 Wyandotte St.
Gist, Wm., 311 Argyle Bldg.
Goldman, Max, 319 Century Bldg.
Gosney, C. W., 720 Shukert Bldg.
Green, J. W., Independence, Mo.
Greenlee, A. R., 3510 E. 10th St.
Griffith, A. C., 522 Rialto Bldg.
Griffith, J. D., 522 Rialto Bldg.
Guffey, Don Carlos, 605 Bryant Bldg.
Hall, C. Lester, 523 Bryant Bldg.
Hall, D. Walton, 525 Bryant Bldg.
Hall, Frank J., 422 Argyle Bldg.
Hall, J. R., 306 Altman Bldg.
Halley, Geo. W., 3540 Campbell St.
Hamel, Geo. F., 706 W. 10th St.
Hamilton, H. D., 31st & Woodland Ave.
Hanawalt, H. O., 1214 Main St.
Hanna, M. A., 100 Rialto Bldg.
Hardin, C. B., 413 Rialto Bldg.
Harrelson, N. O., Suite 100 Rialto Bldg.
Harrington, J. L., 434 Rialto Bldg.
Harrison, Addison M., Lee's Summit, Mo.
Harrison E. Lee, 36th & Kenwood.
Hays, H. C., 307 Rialto Bldg.
Heitzman, Chas. W., 329 Argyle Bldg.
Henderson, J. P., 425 Argyle Bldg.
Henry, Francis J., 2203 Brooklyn.
Herbst, Frank, 9th & Charlotte St.
Hertzler, A. E., 402 Argyle Bldg.
Hetherington, E. M., 725 Bryant Bldg.
Hickerson, J. C., Independence.
Hill, Howard, 424 Argyle Bldg.
Hoffman, O., Jr., 407 Argyle Bldg.
Holbrook, R. W., 415 Argyle Bldg.
Hollis, Luther T., 535 N. Ridge Bldg.
Horrigan, J. A., 31st & Main St.
Howard, John W., 805 McGee St.
Hoxie, G. H., 317 Argyle Bldg.
Hull, A. G., 3610 McGee St.
Hunt, J. E., 317 Argyle Bldg.
Hyde, B. C., 404 Bryant Bldg.
Irwin, Chas. B., 310 Rialto Bldg.
Iuen, F. J., 1334 Grand Ave.
Iuen, W. C., 1334 Grand Ave.
Jackson, C. A., 425 Argyle Bldg.
Jackson, Jabes N., 425 Argyle Bldg.
Jacobs, Benj., 415 Argyle Bldg.
James, S. C., 420 Shukert Bldg.
Jennett, H. N., 4603 W. 9th St.
Jerowitz, H. D., 1233 Grand Ave.
Johnson, Chas. R., 231 Rialto Bldg.
Johnstone, P. A., 500 Shukert Bldg.
Jones, K. P., 1028 Walnut St.
Kanoky, J. P., 912 Walnut St.
Kelly, E. H., 2018 Prospect Ave.
Kepner, Joseph W., 15th & Olive St.
Kimberlin, J. W., 632 Altman Bldg.
King, Geo. A., 415 Argyle Bldg.
King, W. E., 512 Keith & Perry Bldg.
Kistler, J. R., 601 S. W. Blvd.
Klein, W. C., Brunswick Hotel.
Knox, A. C., 724 Bryant Bldg.
Krimminger, C. E., Independence Mo.
Kruger, Geo. G., Lone Jack, Mo.
Kuhn, H. P., Keith & Perry Bldg.
Kuhn, W. F., State Hospital, St. Joseph, Mo.
Kyger, J. W., 815 E. 31st st.
Lahmer, Ira B., Walsenborg, Colo.
Lake, N. E., 1330 Summit St.
Lane, H. H., N. E. Cor. S. W. Blvd. & Jefferson.
Laning, J. H., 623 Shukert Bldg.
Lapp, J. G., 203 Askew.
Laurenzana, D. A., 522 E. 5th St.
Laurenzana, L., 522 E. 5th St.
Lee, R. H., S. E. Cor. 33rd & Penn.
Leonard, H. O., 420 Shukert Bldg.
Leonard, H. Ward, 605 S. W. Blvd.
Lester, Chas. H., 501 Bryant Bldg.
Leverich, Leslie, 716 Central St.
Lewis, J. K., 2810 E. 10th St.
Lewis, N. O., N. W. Cor. 4th & Grand.
Lewis, Nannie P., 1219 Wyandotte St.
Lichtenberg, J. S., Argyle Bldg.
Lieberman, B. A., Argyle Bldg.
Logan, J. E., 1208 Wyandotte.
Look, H. H., 428 Altman Bldg.
Lowe, Frederick M., 415 Argyle Bldg.
Lowtey, W. J., 402 Hall Bldg.
Luscher, L. W., 205 E. 12th St.
Lyle, Halsey M., 311 Argyle Bldg.
Lynch, J. C., 14th & Grand Ave.
McAlester, A. W., Jr., 703 Bryant Bldg.
McArthur, A. W., 512 Shukert Bldg.
McBride, W. L., 503 Bryant Bldg.
McCall, H. B., 1424 Holmes St.
McCrea, Maggie, 535 N. Ridge Bldg.
McDonald, Chett, 527 Rialto Bldg.
McDonald, Park, 527 Rialto Bldg.
McKee, Joseph W., 329 Rialto Bldg.
McKillip, O. L., 532 Altman Bldg.
McQuade, H. D., 210 Rialto Bldg.
McVey, Newton, 324 Rialto Bldg
Mallett, E. P., 302 Argyle Bldg.
Manko, Emanuel, 227 W. 12th St.
Mann, A. W., Oak Grove, Mo.
Mark, E. G., 319 Argyle Bldg.
Martin, H. L., 601 E. 12th St.
Martin, J. C., 3026 E. 23rd St.
Mathias, Edward L., 210 Rialto Bldg.
Merriman, C. S., 2511 Forest Ave.
Middleton, James, 412 N. Mt. St. Gall.
Miller, Abram, 531 Rialto Bldg.
Miller, Hugh, 705 Shukert Bldg.
Mitchell, John T., 510 N. Ridge Bldg.
Moennighoff, Fritz, 513 Rialto Bldg.
Montgomery, W. E., 428 Rialto Bldg.
Morris, W. C., 315 Garfield Ave.
Morrow, C. J., 504 Bryant Bldg.
Morrow, W. F., 400 Altman Bldg.
Mosher, Geo. C., 605 Bryant Bldg.
Mott, J. S., 517 Rialto Bldg.
Murphy, F. E., 405 Deardorff Bldg.
Neff, F. C., 532 Altman Bldg.
Newhouse, Stanley, 452 N. Ridge Bldg.
Nixon, J. W., 517 Shukert Bldg.
Norberg, Geo. B., 311 Argyle Bldg.

O'Connor, C., Cor. 13th & Campbell.
O'Donnell, Alfred, 415 Argyle Bldg.
Overall, T. W., 422 Rialto Bldg.
Owens, M. J., Cor. S. W. Blvd. & Jefferson.
Parker, O. H., Cor. 12th & Central.
Pearse, H. E., 324 Rialto Bldg.
Perkins, J. W., Altman Bldg.
Pettijohn, N. J., 3416 Holmes St.
Phillips, E. T., 1019 Broadway.
Pinckard, C. G., 903 E. 8th St.
Pipkin, Geo. P., 706 Cleveland.
Pittam, J. T., 1106 Broadway.
Porter, Allen L., 100 Rialto Bldg.
Porter, D. R., 430 W. 10th St.
Pugsley, Fred N., 333 Argyle Bldg.
Punton, John, 532 Altman Bldg.
Ragan, Stephen H., 31st & Holmes.
Ragsdale, T. J., Lee's Summit, Mo.
Ralston, J. H., 1800 W. 39th St.
Randolph, A. G., 3303 Woodland Ave.
Rathbone, F. W., 3303 Woodland Ave.
Reed, Wm. M., 422 Rialto Bldg.
Reyling, F. T., 1004 Oak St.
Reynolds, W. T., 324 Shukert Bldg.
Rice, Wm., 402 Hall Bldg.
Richardson, Katherine B., 21 Clinton Pl.
Rieger, Earl C., 1105 W. 24th St.
Ritter, C. A., 702 Bryant Bldg.
Roberson, H. M., 706 W. 10th St.
Boberts, C. F., 720 Shukert Bldg.
Roberts, C. S., Lee's Summit.
Roberts, J. L., 224 Argyle Bldg.
Robertson, J. A., 705 Shukert Bldg.
Robinson, Ernest, 603 Bryant Bldg.
Robinson, J. L., 400 Altman Bldg.
Rogers, Ford B., Argyle Bldg.
Rogers, J. C., 403 Rialto Bldg.
Rosenwald, Leon, 409 Argyle Bldg.
St. Clair, R. L., 5200 St. John Ave.
Sams, Wm. M., 1422 Independence Ave.
Sanders, F. L., 518 Shukert Bldg.
Sanders, St. Elmo, 419 Shukert Bldg.
Sandzen, Carl, Rialto Bldg.
Sawyer, J. F., 317 Rialto Bldg.
Sawyer, Thos. T., 4303 E. 15th St.
Schauffler, E. W., 317 Argyle Bldg.
Schauffler, R. M., 317 Argyle Bldg.
Scott, J. N., 214 N. Ridge Bldg.
Schutz, W. H., 712 Bryant Bldg.
Sheldon, J. G., 405 Altman Bldg.
Shelton, W. A., 405 Argyle Bldg.
Sheley, O. C., Independence, Mo.
Sherer, J. W., 418 Argyle Bldg.
Shumate, D. L., 517 Shukert Bldg.
Singleton, J. M., 1105 E. 15th St.
Skinner, Edward H., 212 Rialto Bldg.
Sloan, R. T., 407 Rialto Bldg.
Smith, J. Herbert, 426 Rialto Bldg.
Smith, R. M., 203 E. 12th St.
Songer, H. E., 3224 Oak St.
Stephens, Nannie, 817 E. 31st St.
Stevens, Wm. W., 513 Rialto Bldg.
Stewart, E. L., 520 Shukert Bldg.
Stofer, S. R., 3618 Independence Ave.
Streett, St. Clair, 302 Argyle Bldg.
Strother, J. S., 415 Keith & Perry Bldg.
Sutton, Richard L., 276 Ridge Bldg.
Swaney, A. G., Lee's Summit, Mo.
Swaney, Loren, Hickman Mills, Mo.
Switzer, Clyde, 12th & Troost.
Talbot, Ambrose, 203 Rialto Bldg.
Taylor, L. G., 429 Deardorff Bldg.
Tesson, N. A. G., 405 Argyle Bldg.
Thomas, A. W., Frisco Hospital, Springfield, Mo.
Thompson, J. H., 402 Deardorff Bldg.
Thompson, James, 207 Rialto Bldg.
Thornton, Thos. R., Lee's Summit, Mo.
Thrailkill, E. H., 307 Rialto Bldg.
Tieman, T. G., 608 S. W. Blvd.
Tiffany, Flavel B., 805 McGee St.
Trimble, W. K., 3444 Prospect.
Trueman, H. G., 600 Bryant Bldg.
Twyman, T. G., Independence, Mo.
Van Eman, Fred, 415 Argyle Bldg.
Voegelin, Samuel, 436 N. Ridge Bldg.
Von Quast, E., 310 Century Bldg.
Wedding, E. A., 2122 E. 15th St.
Weiss, F. H., 416 Deardorff Bldg.
Welch, A. J., 434 Rialto Bldg.
Wever, J. S., 501 Bryant Bldg.
Wheeler, B. H., 422 Deardorf Bldg.
Wheeler, W. S., 205 E. 12th St.
Wherrit, H. P., Independence, Mo.
Willits, W. C., 311 Argyle Bldg.
Wilson, A. M., 906 Main St.
Wilson, C. E., 415 Keith & Perry Bldg.
Wilson, Dora Green, 420 Rialto Bldg.
Wilson, John, 720 Shukert Bldg.
Wolf, I. J., 408 Argyle Bldg.
Wood, D. L., 4 E. 10th St.
Wood, N. P., Independence, Mo.
Wooley, Paul V., 309 Argyle Bldg.
Wyatt, T. E., 3216 Olive St.
Young, O. O.
Zwart, B. H., 1019 Prospect Ave.

## JASPER COUNTY.

Anderson, F. L., Joplin, Mo.
Barnett, A. F., Joplin, Mo.
Blackwell, Z. T., Joplin, Mo.
Bragdon, G. H., Reeds, Mo.
Carpenter, A. L., Carl Junction, Mo.
Chenoweth, L. C., Webb City, Mo.
Clark, A. B., Joplin, Mo.
Clark, J. W., Carterville, Mo.
Cummings, C. C., Joplin, Mo.
Donohoo, Phillip, Joplin, Mo.
Freeman, A. B., Joplin, Mo.
Grantham, S. A., Joplin, Mo.
Haas, H. R., Joplin, Mo.
Hall, Elizabeth, Carthage, Mo.
Harutun, M. B., Joplin, Mo.
Henry, B. M., Alba, Mo.
James, R. M., Joplin, Mo.
Kelso, R. S., Joplin, Mo.
Ketcham, C. M., Carthage, Mo.
Kincheloe, M. B., Joplin, Mo.
Lanyon, Wm. H., Joplin, Mo.
Mallory, W. H., Joplin, Mo.
Matthews, L. I., Joplin, Mo.
Mays, G. I., Joplin, Mo.
McClure, G. W., Carterville, Mo.
McMichael, A. O., Joplin, Mo.
Miller, G. W., Joplin, Mo.
Miller, S. H., Joplin, Mo.
Neff, R. L., Joplin, Mo.
Pifer, J. D., Joplin, Mo.
Post, W. B., Carthage, Mo.
Powers, Everett, Carthage, Mo.
Powers, H. C., Chitwood, Mo.
Sanz, George, Webb City, Mo.
Shelton, M. C., Joplin, Mo.
Snyder, A. R., Joplin, Mo.
Spriggs, M. L., Joplin, Mo.
Steele, W. E., Carthage, Mo.
Taulbee, J. B., Joplin, Mo.
Taylor, H. H., Joplin, Mo.
Winchester, J. M., Joplin, Mo.
Wolfe, B. F., Joplin, Mo.

## JEFFERSON COUNTY.

Bryan, G. G., De Soto, Mo.
Donnell, R. E., De Soto, Mo.
Farrar, W. H., De Soto, Mo.
Gibson, W. E., De Soto, Mo.
Hamel, A. H., De Soto, Mo.
Harris, C. G., Festus, Mo.
Hensley, O. E., Pevely, Mo.
Long, F. L., Farmington, Mo.
McNutt, I. N., Pevely, Mo.

## JOHNSON COUNTY.

Aber, W. H., Montserrat, Mo.
Adcock, D. C., Warrensburg, Mo.
Adcock, J. A. B., Warrensburg, Mo.
Anderson, J. I., Warrensburg, Mo.
Anderson, John T., Cornelia, Mo.
Bozarth, John R., Centerview, Mo.
Bradley, T. L., Warrensburg, Mo.
Case, Z., Warrensburg, Mo.
Gilbert, E. A., Warrensburg, Mo.
Graves, E. A., Kingsville, Mo.
Hall, O. B., Warrensburg, Mo.
Johnson, W. E., Warrensburg, Mo.
Martin, W. L., Chilohowee, Mo.
Murray, L. F., Holden, Mo.
Ozias, C. O., Warrensburg, Mo.
Pare, E. Y., Leeton, Mo.
Park, Henry, Sweet Springs, Mo.
Parker, H. F., Warrensburg, Mo.

Porter, J. E., Knobnoster, Mo.
Rice, John M., Columbus, Mo.
Robinson, L. H., Warrensburg, Mo.
Schofield, L. J., Warrensburg, Mo.
Schooley, R. C., Robins, Mo.
Shy, D. E., Knobnoster, Mo.
Shy, M. P., Knobnoster, Mo.
Simpson, J. T., Holden, Mo.
Taylor, W. E., Owsley, Mo.
Thompson, W. G., Holden, Mo.

LACLEDE COUNTY.

Anderson, J. N., Conway, Mo.
Atchley, John, Lebanon, Mo.
Avery, D. I., Lebanon, Mo.
Billings, J. M., Lebanon, Mo.
Casey, T. H., Lebanon, Mo.
Clark, W. J., Conway, Mo.
Crawford, J. R., Lebanon, Mo.
Herbert, T. B., Lebanon, Mo.
Lindsey, J. W., Orla, Mo.
Lockwood, W. A., Conway, Mo.
McComb, James, Lebanon, Mo.
Perkins, J. M., Lebanon, Mo.
Pinckard, J. A., Lebanon, Mo.
Prichett, P. L., Lebanon, Mo.
Reser, J. H. H., Conway, Mo.
Standard, D. E., 512½ Commercial St., Springfield, Mo.
Tinsley, J. H., Orla, Mo.
Ware, T. V., Lebanon, Mo.

LAFAYETTE COUNTY.

Braecklein, W. A., Higginsville, Mo.
Carter, R. C., Higginsville, Mo.
Carthrae, Lewis, Corder, Mo.
Carthrae, Lewis, Jr., Corder, Mo.
Chalkley, A. J., Corder, Mo.
Cope, J. Q., Lexington, Mo.
Fischer, J. G. W., Alma, Mo.
Fredendall, G. W., Lexington, Mo.
Fulkerson, J. J., Lexington, Mo.
Gaines, E. F., Bates City, Mo.
Harwood, W. G., Dover, Mo.
Lieser, F. D., Concordia, Mo.
Lissack, H. M., Lexington, Mo.
McLennan, T. A., Higginsville, Mo.
Mann, F. W., Wellington, Mo.
Mann, J. A., Wellington, Mo.
Oetting, O. G., Concordia, Mo.
Ott, C. W., Higginsville, Mo.
Payne, B. T., Lexington, Mo.
Payne, N. B., Lexington, Mo.
Perrie, John, Mayview, Mo.
Roberts, M. G., Lexington, Mo.
Ryland, C. T., Lexington, Mo.
Schneider, J. A., Concordia, Mo.
Schreiman, F., Concordia, Mo.
Watts, R. D., Napoleon, Mo.
Webb, W. C., Higginsville, Mo.

LAWRENCE-STONE.

Andrews, J. P., Marionville, Mo.
Brown, O. H., Mt. Vernon, Mo.
Burney, W. S., Miller, Mo.
Clark, S. M., Halltown, Mo.
Craven, J. H., Marionville, Mo.
Doggett, C. R., Marionville, Mo.
Flemming, J. B., Aurora, Mo.
Goodrich, R. E., Crane, Mo.
Gum, L. J., Lawrenceburg, Mo.
Hardin, D. E., Aurora, Mo.
Harris, J. A., Mt. Vernon, Mo.
Henson, L., Galena, Mo.
Hoffman, D. M., Crane, Mo.
Holmes, W. M., Marionville, Mo.
King, C. R., Crane, Mo.
Loveland, W. S., Verona, Mo.
Madry, A. H., Aurora, Mo.
Miller, Thomas, Aurora, Mo.
Rice, Marion, Stotts City, Mo.
Rodman, W. W., Pierce City, Mo.
Roseberry, E. C., Mt. Vernon, Mo.
Shelton, C. W., Mt. Vernon, Mo.
Smart, R. W., Marionville, Mo.
Stevenson, F. S., Aurora, Mo.
Wade, E. E., School, Mo.
Wade, J. H., Ponce de Leon, Mo.

LEWIS COUNTY.

Brown, J. C., Lewistown, Mo.
Cole, Paul F., Steffenville, Mo.
Dunlop, H. E., Canton, Mo.
Ellery, Wm., LaGrange, Mo.
Ellery, Wm. L., LaGrange, Mo.
Frame, C. N., Ewing, Mo.
Knight, G. P., Benjamin, Mo.
McCutchan, G. L., Canton, Mo.
McGlasson, T. F., Lewistown, Mo.
McKim, H. W., LaBelle, Mo.
Owens, N. O., LaGrange, Mo.
Schofield, R. B., Lewistown, Mo.
Shanks, C. O., Canton, Mo.
Simpson, W. B., LaBelle, Mo.
Wilson, R. E., LaBelle, Mo.
Young, J. A., LaGrange, Mo.

LINCOLN COUNTY.

Diggs, Joseph, Hawk Point, Mo.
Duwelius, L. H., Briscoe, Mo.
Knox, James A., Whitesides, Mo.
Moore, W. L., Truxton, Mo.
Pendleton, L., Troy, Mo.
Prewitt, Geo. E., Hawk Point, Mo.
Smith, W. P., Troy, Mo.
Strickland, J. R., Moscow Mills, Mo.
Taylor, A. M., Elsberry, Mo.

LINN COUNTY.

Buck, U. G., Rothville, Mo.
Burke, F. W., Laclede, Mo.
Burke, J. L., Laclede, Mo.
Cockran, F. B., Brookfield, Mo.
Dryden, U. C., Purdin, Mo.
Ellis, W. W., Marceline, Mo.
Eure, J. B., Brookfield, Mo.
Fore, T. P., Brookfield, Mo.
Frazier, Leland, Marceline, Mo.
Haley, Robert, Brookfield, Mo.
Howard, D. F., Brookfield, Mo.
Jenkins, C. E., Brookfield, Mo.
Johnson, H. C., Meadville, Mo.
Lane, J. W., Linneus, Mo.
Morris, R. H., Linneus, Mo.
Musgrove, W. H., Eversonville, Mo.
Oven, T. P., Brookfield, Mo.
Patrick, P. L., New Boston, Mo.
Polson, J. T., Laclede, Mo.
Putman, B. B., Marceline, Mo.
Putman, Ola, Marceline, Mo.
Ridings, O. H., Meadville, Mo.
Scott, W. B., Bucklin, Mo.
Shepherd, J. D., Meadville, Mo.
Standly, E. D., Linneus, Mo.
Standly, Z. T., Laclede, Mo.
Standly, K. V., Brookfield, Mo.
Stratton, C. D., Rothville, Mo.
Thompson, J. M., Meadville, Mo.
Whaley, R. W., Browning, Mo.

LIVINGSTON COUNTY.

Alexander, G. W., Chula, Mo.
Barney, R., Chillicothe, Mo.
Batdorff, F. P., Farmersville, Mo.
Chaffin, R. E., Belton, Mo.
Gibson, H. C., Mooresville, Mo.
Girdner, W. M., Chillicothe, Mo.
Gordon, David, Chillicothe, Mo.
Grace, H. M., Chillicothe, Mo.
Piatt, K. S., Chillicothe, Mo.
Minor, James C., Chillicothe, Mo.
Shelton, J. C., Chillicothe, Mo.
Simpson, A. J., Chillicothe, Mo.
Simpson, W. R., Chillicothe, Mo.
Stevens, B. N., Chillicothe, Mo.
Swope, W. A., Wheeling, Mo.
Trimble, J. W., Wheeling, Mo.
White, W. L., Springhill, Mo.
Yates, D. D., Dawn, Mo.

MADISON COUNTY.

Anthony, C. A., Fredericktown, Mo.
Barron, W. H., Mine La Motte, Mo.
Carr, G. M., Marquand, Mo.
Davis, C. U., Fredericktown, Mo.

Dines, G. L., Mine La Motte, Mo.
Gale, F. W., Marquand, Mo.
Greenwood, G. H., Fredericktown, Mo.
Haley, O., Fredericktown, Mo.
Newberry, F. R., Fredericktown, Mo.
Nifong, Wm., Fredericktown, Mo.
Slaughter, S. C., Fredericktown, Mo.
Smith, J. K., Fredericktown, Mo.

MARION COUNTY.

Banks, H. L., Hannibal, Mo.
Baskett, J. N., Hannibal, Mo.
Blue, A. B., Hannibal, Mo.
Bounds, E. H., Hannibal, Mo.
Bourn, J. J., Hannibal, Mo.
Bush, F. W., Hannibal, Mo.
Chilton, J. C., Hannibal, Mo.
Chowning, Thomas, Hannibal, Mo.
Detweiler, A. J., Hannibal, Mo.
Dudley, C. R., Hannibal, Mo.
Farrell, J. J., Hannibal, Mo.
Glahn, C. P., Palmyra, Mo.
Goodier, R. H., Hannibal, Mo.
Guss, W. C., Hannibal, Mo.
Hays, W. H., Hannibal, Mo.
Hill, I. E., Hannibal, Mo.
Hornback, E. T., Hannibal, Mo.
Howell, J. S., Hannibal, Mo.
Paxon, C. E., Hannibal, Mo.
Primm, J. N., Hannibal, Mo.
Roselle, T. A., Palmyra, Mo.
Schmidt, R., Hannibal, Mo.
Shanks, A. L., Hannibal, Mo.
Smith, S. G., Hannibal, Mo.
Smith, U. S., Hannibal, Mo.
Vandiver, C. E., Hannibal, Mo.
Waldo, E. E., Hannibal, Mo.

MERCER COUNTY.

Bristow, G. M., Princeton, Mo.
Buren, C. R., Princeton, Mo.
Chesmore, H. P., Princeton, Mo.
Wally, H., Coansville, Mo.
Oyler, H. W., Millgrove, Mo.
Perry, J. M., Princeton, Mo.
Pickett, C. P., Mercer, Mo.
Powell, B. S., Princeton, Mo.

MILLER COUNTY.

Allee, W. L., Eldon, Mo.
Allee, W. S., Olean, Mo.
Bennage, J. L., Iberia, Mo.
Brockman, H. H., Eldon, Mo.
De Vilbiss, E. F., Eugene, Mo.
Dixon, W. D., Tuscumbia, Mo.
Gilleland, J. L., Olean, Mo.
Kouns, D. H., Tuscumbia, Mo.
Leslie, Walter H., Spring Garden, Mo.
Temple, J. W., Eldon, Mo.
VonGramp, W. A., Iberia, Mo.
Walker, G. D., Eldon, Mo.

MISSISSIPPI COUNTY.

Chapman, A. W., Charleston, Mo.
Finley, F. L., Anniston, Mo.
Hamner, M. D., Bertrand, Mo.
Lynch, J. W., Charleston, Mo.
Martin, A. J., East Prairie, Mo.
Martin, S. P., East Prairie, Mo.
Miller, E. F., Verdella, Mo.
Ogilvie, R. K., Charleston, Mo.
Reid, H. L., Charleston, Mo.

MONITEAU COUNTY.

Allee, E. M., Speed, Mo.
Bramel, H. W., McGirk, Mo.
Burke, J. P., California, Mo.
Crum, J. A., Marion, Mo.
Dearing, W. A., Jamestown, Mo.
Freudenberger, H., Clarksburg, Mo.
Gray, L. M., California, Mo.
Klueber, H. C., California, Mo.
Lang, J. H., Centertown, Mo.
Latham, H. W., Latham, Mo.
Latham, L. L., Latham, Mo.
Marsh, J. W., Tipton, Mo.
Norman, J. B., California, Mo.
Patterson, W. R., Tipton, Mo.
Popejoy, H. R., High Point, Mo.
Redmon, S. H., Tipton, Mo.
Robertson, J. M., Bunceton, Mo.
Stewart, J. B., Clarksburg, Mo.
Thorpe, A. V., Jamestown, Mo.
Wilson, G. S., Fortuna, Mo.

MONROE COUNTY.

Baker, Chas., Santa Fe, Mo.
Bell, W. T., Stoutville, Mo.
Brown, J. E., Florida, Mo.
Dixon, C. H., Holliday, Mo.
Duncan, Edward, Long Branch, Mo.
Hull, J. R., Monroe City, Mo.
Lloyd, T. B., Paris, Mo.
McGee, Dan, Paris, Mo.
McMurry, M. C., Paris, Mo.
McNutt, W. B. A., Monroe City, Mo.
Moss, F. M., Paris, Mo.
Payne, H. G., Paris, Mo.
Ragsdale, G. M., Paris, Mo.
Shobe, H. G., Paris, Mo.

MORGAN COUNTY.

Bay, Harry, Florence, Mo.
Beale, J. T., Versailles, Mo.
Fry, C. E., Syracuse, Mo.
Gunn, A. J., Versailles, Mo.
Lutman, H. N., Versailles, Mo.
Short, J. S., Versailles, Mo.
Well, Wm., Versailles, Mo.
Woods, P. G., Versailles, Mo.

NEWTON COUNTY.

Benton, A. W., Neosho, Mo.
Bowers, Horace, Neosho, Mo.
Bridges, J. M., Tipton Ford, Mo.
Brown, W. D., Newtonia, Mo.
Campbell, W. M., Seneca, Mo.
Chapman, U. S., Diamond, Mo.
Doty, E. G., Anderson, Mo.
Foster, H. F., Neosho, Mo.
Hancock, J. B., Newtonia, Mo.
Hodges, J. J., Granby, Mo.
Lamson, J. W., Neosho, Mo.
Lamson, R. C., Neosho, Mo.
Langley, J. W., Granby, Mo.
Maas, A., Neosho, Mo.
Porter, H. L., Seneca, Mo.
Roseberry, E. M., Neosho, Mo.
Weems, D. L., Neosho, Mo.
Wills, R. L., Neosho, Mo.

NODAWAY COUNTY.

Allen, A. B., Maryville, Mo.
Anthony, F. R., Maryville, Mo.
Barnett, A. D., Guilford, Mo.
Crowson, E. L., Pickering, Mo.
Cummings, K. C., Maryville, Mo.
Day, Hiram, Parnell, Mo.
Dean, C. E., Burlington Junction, Mo.
Dean, J. W., Maryville, Mo.
Dean, L. E., Maryville, Mo.
Frank, C. E., Maryville, Mo.
Goodson, H. C., Hopkins, Mo.
Hereford, W. B., Pickering, Mo.
Howell, C. F., Bedison, Mo.
Johns, Gomer, Wilcox, Mo.
Kirk, C. W., Hopkins, Mo.
Koch, C. D., Maryville, Mo.
Larrabee, J. A., Barnard, Mo.
McClanahan, J. M., Guilford, Mo.
Nash, G. A., Maryville, Mo.
Pierpoint, J. E., Skidmore, Mo.
Pollard, M. M., Barnard, Mo.
Sargent, D. A., Hopkins, Mo.
Saylor, H. L., 215 Citizens Bank, Des Moines, Ia.
Smith, D. G., Arkoe, Mo.
Todd, J. H., Maryville, Mo.
Wallis, F. C., Maryville, Mo.
Wallis, Wm. M. Jr., Maryville, Mo.
Wallis, W. M. Sr., Maryville, Mo.

PETTIS COUNTY.

(All Addresses Sedalia, Mo., unless otherwise stated.)
Abbers, E. A., Smithton, Mo.
Alderman, M. C., Porter Bldg.
Bishop, W. T., Hughesville, Mo.
Bohling, C., 5th & Ohio.
Bronson, I. T., 2nd & Ohio.
Campbell, A. J., 3rd & Ohio.
Cartwright, C. C., R. F. D. No. 1, Sedailia, Mo.
Clabaugh, O. W., Greenridge, Mo.
Cole, H. B., Porter Bldg.
Collins, M. T., 219 Ilgenfritz Bldg.
Cowan, W. G., 504 S. Ohio.
Dunlap, W. O., 108 W. Main St.
Dyer, D. P., Dresden, Mo.
Evans, W. H., Beaman, Mo.
Ferguson, Leslie, Greenridge, Mo.
Ferguson, W. J., 321 S. Ohio.
Halton, O. H., 504 S. Ohio.
Harris, W. B., Georgetown, Mo.
Heaton, A. H., 109 W. 7th St.
Hite, H. A., Greenridge, Mo.
Hubbard, J. D., Versailles, Mo.
Kelly, S. G., Ilgenfritz Bldg.
Knott, Minerva, Solano, New Mexico.
Love, J. G., State Hospital, Nevada, Mo.
McNeil, C. A., M. K. & T. Hospital.
McNeil, G. E., M. K. & T. Hospital.
Mitchell, J. E., R. F. D. No. 1, Hughesville, Mo.
Morley, Frank R., 1103A E. 5th St.
Nasse, Edmund, 2nd & Ohio.
Overstreet, W. C., 312 S. Ohio.
Prowell, J. D., Longwood, Mo.
Sands, M. L., Cole Camp, Mo.
Shirk, W. S., Porter Bldg.
Simonds, Wallace, Cassidy Bldg.
Sutton, F. L., 504 S. Ohio.
Titsworth, Guy, 1103A E. 5th St.
Trader, C. S., 5th & Ohio.
Tucker, A. J., 3rd & Ohio.
Walker, W. E., Lamonte, Mo.
Wood, E. A., Maywood Hospital.
Yancey, E. F., M. K. & T. Hospital.

PHELPS COUNTY.

Baysinger, S. L., Rolla, Mo.
Breuer, W. H., St. James, Mo.
Breuer, R. E., Newburg, Mo.
Burns, W. F., Newburg, Mo.
Cowan, R. B., Edgar Springs, Mo.
Fulbright, C. H., St. James, Mo.
Johnson, R. L., Rolla, Mo.
Livingston, A. A., Elk Prairie, Mo.
Love, J. G., State Hospital, Nevada, Mo.
Matlock, L. J., St. James, Mo.
Orrick, G. W., Rolla, Mo.
Reed, H. L., Beulah, Mo.
Rowe, S. B., Rolla, Mo.
Short, Martha, Rolla, Mo.
Smith, B. T., Newburg, Mo.
Smith, W. S., Rolla, Mo.

PLATTE COUNTY.

Chastain, C. H., Weston, Mo.
Clark, H. M., Platte City, Mo.
Coffey, G. C., Platte City, Mo.
Cowan, Lee, Iatan, Mo.
Dinwiddie, F. G., Camden Point, Mo.
Gardener, P. L., Waldron, Mo.
Hale, J. M., Dearborn, Mo.
Herndon, A. S., Camden Point, Mo.
Hull, E. R., Camden Point, Mo.
Mizener, J. L., Edgerton, Mo.
Naylor, Alva, Platte City, Mo.
Patterson, H. H., Edgerton, Mo.
Redman, Spencer, Platte City, Mo.
Shafer, F. M., Edgerton, Mo.
Shafer, L. A., Edgerton, Mo.
Shultz, J. W., Weston, Mo.
Swaney, W. D., Linkville, Mo.
Underwood, J., Parkville, Mo.
Winter, J. H., Parkville, Mo.
Yokum, G. D., Parkville, Mo.

POLK COUNTY.

Brown, C. H., Fair Play, Mo.
Cousins, S. W., Morrisville, Mo.
Drake, W. D., Bolivar, Mo.
Hopkins, W. S., Bolivar, Mo.
Hunt, L. L., Fair Play, Mo.
Loafman, J. E., Bolivar, Mo.
Mitchell, A. P., Bolivar, Mo.
Paris, R. W., Morrisville, Mo.
Roberts, J. F., Bolivar, Mo.

PULASKI COUNTY.

Carter, W. C., Dixon, Mo.
Murphy, H. C., Richland, Mo.
Oliver, E. A., Richland, Mo.
Ragan, W. L., Richland, Mo.
Rolens, L. E., Dixon, Mo.
Rolens, M. F., Dixon, Mo.
Sell, W. J., Waynesville, Mo.
Stebbins, N. I., Crocker, Mo.
Tice, L., Waynesville, Mo.

PUTNAM COUNTY.

Carryer, C. H., Unionville, Mo.
Cozad, F. A., Powerville, Mo.
Geisinger, E. J., Unionville, Mo.
Haynes, Lee, Mendota, Mo.
Montgomery, E. A., Unionville, Mo.
Noel, I. F., Unionville, Mo.
Rice, F. D., Lucerne, Mo.
Townsend, J. A., Unionville.

RALLS COUNTY.

Birney, W. L., Oakwood, Mo.
Downing, T. J., New London, Mo.
Graves, C. H., Center, Mo.
Harwood, W. S., Rensselaer, Mo.
Hendrix, W. G., New London, Mo.
McCullon, R. W., Center, Mo.
Monroe, Thomas, Center, Mo.
Walter, Fred, Perry, Mo.
Waters, W. T., New London, Mo.
Winn, M., Ilasco, Mo.
Wix, F. M., Center, Mo.

RANDOLPH COUNTY.

Barnhart, D. A., Huntsville, Mo.
Bragg, G. G., Huntsville, Mo.
Clapp, C. B., Moberly, Mo.
Cuppaidge, G. O., Moberly, Mo.
Dickerson, W., Renick, Mo.
Dinwiddie, T. H., Higbee, Mo.
Dutton, C. K., Moberly, Mo.
Hickerson, E. R., Moberly, Mo.
Johnson, G. A., Moberly, Mo.
Lowery, John A., Clifton Hill, Mo.
Mangus, C. W., Moberly, Mo.
Mangus, T. D., Moberly, Mo.
Mitchell, R. A., Clark, Mo.
Terrill, W. R., Clifton Hill, Mo.

RAY COUNTY.

Ball, J. E., Richmond, Mo.
Clark, J. F., Rayville, Mo.
Cook, T. B., Rayville, Mo.
Ellis, L. E., Orrick, Mo.
Estill, W. G., Lawson, Mo.
Etherton, W. C., Camden, Mo.
Greene, L. D., Richmond, Mo.
Grimes, Marvin, Hardin, Mo.
Hamilton, R. L., Richmond, Mo.
Higdon, E. F., Richmond, Mo.
Joiner, G. W., Rayville, Mo.
Major, H. S., Hardin, Mo.
McGaugh, E. T., Richmond, Mo.
Rentfro, E. W., Rayville, Mo.
Roney, J. H., Lawson, Mo.
Sevier, Robert, Richmond, Mo.
Sheetz, Robert, Orrick, Mo.
Shotwell, C. B., Richmond, Mo.
Smith, Geo. W., Henrietta, Mo.
Smith, James W., Richmond, Mo.
Stapp, J. H., Hardin, Mo.
Todd, Geo. O., Lawson, Mo.

RIPLEY COUNTY.

Bennie, W. D., Naylor, Mo.
Posey, J. J., Naylor, Mo.
Proctor, S. A., Doniphan, Mo.
Redwine, J. T., Doniphan, Mo.

SALINE COUNTY.

Gore, A. E., Marshall, Mo.
Gore, D. C., Marshall, Mo.
Hall, J. R., Marshall, Mo.
Harris, J. E., Marshall, Mo.
Harrison, Wm., Marshall, Mo.
Howard, J. H., Slater, Mo.
Jarvis, W. M., Slater, Mo.
Manning, D. T., Marshall, Mo.
McGuire, M. S., Arrow Rock, Mo.
Richart, G. A., Blackburn, Mo.
Ringen, R. H., Sweet Springs, Mo.
Shuck, L. J., Nelson, Mo.
Spoots, B. M., Marshall, Mo.
Walker, E. N., Grand Pass, Mo.
Whittington, W. L., 415 Albemoral St., St. Joseph, Mo.

ST. CHARLES COUNTY.

Baltzer, H. F. W., Cottleville, Mo.
Bitter, Carl, St. Charles, Mo.
Corley, H. N., St. Paul, Mo.
Dunn, F., St. Peters, Mo.
Glosemeyer, L. H., O'Fallon, Mo.
Gossow, A. A., St. Charles, Mo.
Hardin, T. L., St. Charles, Mo.
Jackson, T. J., St. Charles, Mo.
Martin, J., Hamburgh, Mo.
Morgner, Omar, St. Charles, Mo.
Mudd, J. R., St. Charles, Mo.
Sandfos, Frank, Portage Des Sioux, Mo.
Stumberg, B. K., St. Charles, Mo.
Tainter, F. J., St. Charles, Mo.
Wentker, B. P., St. Charles, Mo.
Wiegers, T. L., Flint Hill, Mo.

ST. CLAIR COUNTY.

Bell, W. E., Osceola, Mo.
Cline, C. W., Appleton City, Mo.
Landaker, C. L., Collins, Mo.
Mason, W. J., Weaubleau, Mo.
Seevers, Ruth, Osceola, Mo.
Smith, R. J., Johnson City, Mo.
Stratton, L. S., Roscoe, Mo.
Williams, D. B., Osceola, Mo.

ST. FRANCOIS COUNTY.

Applebery, R., Leadwood, Mo.
English, J. H., Farmington, Mo.
Evans, A. L., Bonne Terre, Mo.
Haney, T. L., Flat River, Mo.
Keith, F. L., Flat River, Mo.
McKenzie, D. H., Leadwood, Mo.
Marshall, Albert, Bonne Terre, Mo.
Poston, C. P., Bonne Terre, Mo.
Robinson, B. I., Farmington, Mo.
Stammer, F. W., Bismark, Mo.
Williams, G. B., Flat River, Mo.
Woods, S. Elliott, Bonne Terre, Mo.

STE. GENEVIEVE COUNTY.

Ford, Edward, River aux Vases, Mo.
Hertich, C. J., Ste. Genevieve, Mo.
Hinch, F. E., Ste. Genevieve, Mo.
Jarvis, N. W., Bloomsdale, Mo.
Lanning, R. W., Ste. Genevieve, Mo.
Moore, C., St. Marys, Mo.
Morgansteen, H. J., Weingarten, Mo.
Rutledge, G. M., Ste. Genevieve, Mo.
Shirley, J. M., St. Marys, Mo.
Wilkins, J. A., St. Marys, Mo.

ST. LOUIS COUNTY.

Armstrong, C. L., Webster Groves, Mo.
Armstrong, J. H., Kirkwood, Mo.
Baker, Marshall, Webster Groves, Mo.
Brossard, P. M., Maplewood, Mo.
Carter, Howard, Webster Groves, Mo.
Cape, L. W., Maplewood, Mo.
Coleman, H. T., Pattonville, Mo.
Dalton, M., Fenton, Mo.
Denny, R. B., Eureka, Mo.
Douglas, J. T., Ferguson, Mo.
Dunnavant, C. A., Kirkwood, Mo.
Forsyth, R. C., Kirkwood, Mo.
Greensfelder, H. B., Kirkwood, Mo.
Guibor, F. E., Maplewood, Mo.
Jenson, N. N. Florrisant, Mo.
Koch, O. W., Ballwin, Mo.
Maisch, Aug., Manchester, Mo.
Miles, H., Webster Groves, Mo.
Mills, R. W., Webster Groves, Mo.
Moore, R. D., Central, Mo.
O'Brien, L. F., Sappington, Mo.
Pfister, John D., Creve Coeur, Mo.
Pitman, John, Kirkwood, Mo.
Randle, H. T., Clayton, Mo.
Thurman, E. J., 2805 S. Kingshighway, St. Louis.
Townsend, W. H., Maplewood, Mo.
Will, S. J., Jefferson Barracks, Mo.
Wyer, H. G., Kirkwood, Mo.
Zuppann, Chas., Ballwin, Mo.

ST. LOUIS MEDICAL SOCIETY.

(All addresses St. Louis, Mo., unless otherwise specified.)

Abeken, F. W., 3531 S. Broadway.
Albrecht, Franklin H., Humboldt Bldg.
Alexander, Robert D., Mo. Pac. Hosp.
Allison, Nathaniel, Humboldt Bldg.
Alt, Adolf, 316 Metropolitan Bldg.
Althans, Carl, 2024 S. Jefferson Ave.
Ambrose, Olney A., 6125 Bartmer Ave.
Ameiss, Frederick C., Vanol Bldg.
Amerland, J. H., 2739 Chippewa St.
Amos, Newton W., 3001 Olive St.
Amyx, Robert F., 1943 N. 11th St.
Apperson, Edwin L., 912 N. Taylor Ave.
Atkinson, Robert C., 3002 Lafayette Ave.
Auf Der Heide, Wm. D., 2752 Arsenal St.
Auler, Hugo A., 2708 Lynch St.
Ayars, Treston R., 3901 Easton Ave.
Babler, Edmund A., 4826 Delmar Ave.
Bailey, Fred Warren, 3555A Arsenal St.
Baker, Richard W., Altadena, Calif.
Baker, William M., 5424 Easton Ave.
Ball, Charles H., 4109A Lee Ave.
Ball, James M., 4500 Olive St.
Ball, Otho F., 603 Metropolitan Bldg.
Barck, Carl, Humboldt Bldg.
Barclay, Robert, 3894 Washington Ave.
Bardenheier, F. G. A., 900 S. 4th St.
Barker, William S., 1101 Tyler St.
Barnes, A. S., Sr., 5434 Vernon Ave.
Barnes, A. S., Jr., 210 Mo. Trust Bldg.
Barnes, Percival C., 5434 Maple Ave.
Barnes, Rollin H., 219 Metropolitan Bldg.
Barr, Clarence M., Female Hospital.
Barrington, Richard L., 208 Old Custom House.
Bartlett, Willard, 4257 Washington Ave.
Bartscher, Hugo W., 829 Bremen Ave.
Bassett, Samuel T., City Hospital.
Bauduy, Jerome K., 340 N. Spring Ave.
Bauer, Charles E., 2104 N. 14th St.
Baumgarten, Gustav, Humboldt Bldg.
Baumgarten, Walter, Humboldt Bldg.
Baumgartner, Conrad, 2108 Russell Ave.
Becker, William H., 4743 Labadie Ave.
Beckham, Genevieve S., 404 Century Bldg.
Bedal, Adelheid C., 4367 Delmar Ave.
Behrens, Louis H., 301 Times Bldg.
Benker, Oscar H., 3618 S. Jefferson Ave.
Bennett, Floyd W., 2837 Park Ave.
Benson, Benjamin G., 2136 Benton St.
Bishop, F. L., 4271 Washington Blvd.
Blair, Vilray P., Linmar Bldg.
Blattner, Fred O., 238 S. Jefferson Ave.
Bliss, Malcolm A., Humboldt Bldg.
Bock, Arminius F., 1109 N. Grand Ave.
Boehm, Joseph L., 8th & Morgan Sts.
Boemler, George, 1922 St. Louis Ave.
Boggs, John D., 813 N. 18th St.
Bohannon, Burton, 210 S. Jefferson Ave.
Boisliniere, Louis C., 3561 Olive St.
Bond, H. Wheeler, 17 Vandeventer Pl.
Bond, Young H., 426 N. Grand Ave.

Boogher, Leland, 512 Mo. Trust Bldg.
Booth, David S., 425 Metropolitan Bldg.
Borck, Edward, 3928 N. 20th St.
Botts, McDowell, Frisco Hospital.
Bradley, A. H., 619 Metropolitan Bldg.
Brady, Jules M., 1467 Union Blvd.
Brandenburger, L. A., 2900 Eads Ave.
Brennan, John W., 2001 Olive St.
Brookes, Henry S., 3557 Lafayette Ave.
Brooks, Fred. C., Grand & Lindell Aves.
Broome, G. Wiley, 619 N. Kingshighway.
Brown, John Y., 611 Metropolitan Bldg.
Bryan, R. Shepard, 735 Century Bldg.
Bryan, Wm. M. C., 3858 Westminster Pl.
Buchanan, J. M., 721 N. Kingshighway.
Buckwalter, John C., 309 Century Bldg.
Buhman, Rudolph, 5264 Page Ave.
Bunch, Rodney J., City Hospital.
Burford, Cyrus E., 955 Hamilton Ave.
Burnett, Edwin C., 548 Century Bldg.
Burns, Robert, Lister Bldg.
Cadwallader, I. H., 919 N. Taylor Ave.
Cale, George W., 12 Lennox Pl.
Calhoun, J. G., 601 Metropolitan Bldg.
Calnane, John A., 5268 Maple Ave.
Cameron, Solon, 4552 Ashland Ave.
Campbell, A. V., 430 Globe-Democrat Bldg.
Campbell, Given, 3429 Morgan St.
Campbell, O. H., 3542 Washington Ave.
Caplan, Leo, Lister Building.
Carman, Russell D., 4318 Olive St.
Carson, Gibbon W., 301 Century Bldg.
Carson, Norman B., Humboldt Bldg.
Chaddock, Charles G., Humboldt Bldg.
Chapman, Henry N., 3821 Delmar Blvd.
Charles, Joseph W., Humboldt Bldg.
Clapper, William L., 5004 Delmar Blvd.
Clark, E. S., 2713 Washington Ave.
Clarke, B. William, Vanol Bldg.
Clemens, J. R., 416 Metropolitan Bldg.
Clopton, Malvern B., Humboldt Bldg.
Collasowitz, A., 1500 Chouteau Ave.
Connolly, P. D., 2556 N. Grand Ave.
Cook, Geo. E., 1739 N. 9th St.
Cook, Jerome E., 4133 Laclede Ave.
Cooley, Edward L., 937 Hamilton Ave.
Crandall, Geo. C., 4283 Olive St.
Creveling, H. Clay, Humboldt Bldg.
Crossen, Harry S., 4477 Delmar Blvd.
Culp, Earl E., 2928 N. Vandeventer Ave.
Cummings, Harry J., 219 Metropolitan Bldg.
Curtis, A. N., 4205 Virginia Ave.
Dalton, H. C., 1308A N. Grand Ave.
Dames, Alphonse F., Easton & Goodfellow Aves.
Davis, Louis H., 1030 Morrison Ave.
Davis, Robert H., Lister Bldg.
Davis, Wheeler, 5013A Page Ave.
Dean, Jno. McH., 420 Metropolitan Bldg.
Deutsch, Wm. S., 3135 Washington Ave.
Dickerson, Harry W., 3848 Cook Ave.
Dickerson, Wilmer L., 5424 Easton Ave.
Dixon, Chas. H., Lister Bldg.
Dorsett, E. Lee, 5070 Washington Ave.
Dorsett, Walter B., Linmar Bldg.
Doyle, Wm. J., 2312 Washington Ave.
Drake, G. S., Jr., 3534 Washington Ave.
Drescher, Fred. B., 3860 S. Broadway.
Dudley, Geo. F., 4043 McPherson Ave.
Duncan, John H., Humboldt Bldg.
Dutzi, August, 325 Soulard St.
Dwyer, Michael J., 822 S. Ewing Ave.
Eberlein, Edwin W., 1208 Dillon St.
Ehrenfest, H., 626 Metropolitan Bldg.
Ehrenreich, Herman S., 1620 Carr St.
Eidmann, W. P., 3160 Morganford Rd.
Elbrecht, Oscar, Female Hospital.
Elmer, Warren P., 346 N. Boyle Ave.
Engelbach, Wm., Humboldt Bldg.
Epstein, Meyer J., 4046 McPherson Ave.
Esselbruegge, F. C., 3740 N. 11th St.
Ewing, Arthur E., 5956 Cabanne Ave.
Ewing, Fayette C., 450 Century Bldg.
Eyermann, Edwin H., 1800 S. Broadway.
Faber, John E., 2133 S. Jefferson Ave.
Fahlen, Fred, Humboldt Bldg.
Falk, John C., 4568 Page Ave.
Farrar, John O'F., Lister Bldg.
Ferrel, H. E., Grand & Franklin Aves.
Fisch, Carl, 3212 Pine St.
Fischer, Waldemar E., Linmar Bldg.
Fleming, A. W., 4137 Manchester Ave.
Ford, W. H., G. D., Washington, D. C.
Forster, Davis, 1115 Union Ave.
Forster, Otto E., 513 Carleton Bldg.
Fowler, S. R., 508 Carleton Bldg.
Frankenthal, M. A., 4163 McPherson Ave.
Frazer, H. S., 1111 Chouteau Ave.
Freudenstein, Wm. H., 306 S. Ewing Ave.
Freund, Newton M., 1440 S. 18th St.
Friedman, Jacob, 308 N. 6th St.
Frielingsdorf, E. H., 2202 S. Broadway.
Fries, William A., 1544 S. Broadway.
Fry, Frank R., Humboldt Bldg.
Fuchs, W. H., 3202 Lafayette Ave.
Fuhrmann, R. H., 3221 California Ave.
Fulton, A. L., 617 Chouteau Ave.
Funkhouser, R. M., 4354 Olive St.
Furney, Eliott E., 3417 Morgan St.
Gallagher, John F., 919 N. Sarah St.
Garstang, D. Bule, Linmar Bldg.
Gayler, Wenzel C., 3904 Laclede Ave.
Geltz, Henry A., Humboldt Bldg.
Gelhorn, George, Linmar Bldg.
Glasgow, Frank A., 3894 Washington.
Glennon, W. P., 420 Metropolitan Bldg.
Godfrey, Geo. B., 900 S. 4th St.
Goebel, Arthur, 3508 Manchester Ave.
Goodwin, E. J., 603 Metropolitan Bldg.
Gordon, F. N., 1542 Mississippi Ave.
Gorin, M. Geo., 4225 W. Belle Pl.
Gradwohl, R. B. H., 223 Victoria Bldg.
Graham, Isaac E., 4577 Page Ave.
Graham, Thomas E., City Dispensary, 11th & Market Sts.
Grant, John M., 536 N. Taylor Ave.
Graul, Henry P., 3353 Nebraska Ave.
Graul, John D., 3512 Crittenden St.
Graul, Robert E., 2905 Cherokee St.
Graves, Wm. W., 727 Metropolitan Bldg.
Gray, Isabel S., 333 N. Euclid Ave.
Gray, Robert Q., Linmar Bldg.
Green, John, Jr., 625 Metropolitan Bldg.
Greer, Edward O., 2750 Park Ave.
Gregg, Arthur M., 5800 Arsenal St.
Greiner, Theodore, 5534A Easton Ave.
Grindon, Joseph, 3894 Washington Ave.
Gross, Julius H., 306 Oriel Bldg.
Grosse, Louis W., 3665 Juniata St.
Grote, Wm. F., 1225 Sullivan Ave.
Guggenheim, L. T., 4058 Lindell Blvd.
Guhman, Chas. N., 4298 Finney Ave.
Guhman, J. O., 4531 Washington Ave.
Guhman, M. G., 3505 N. Jefferson Ave.
Gunlach, Arthur, 2202 University St.
Haase, Moses E., 4263 W. Pine Blvd.
Habermaas, Albert, 3817 Cleveland Ave.
Hall, Harry R., 925 Goodfellow Ave.
Hall, W. A., 1597 Tower Grove Ave.
Hallam, John C., 301 Mermod-Jaccard Bldg.
Hardaway, Wm. A., Lister Bldg.
Hardy, Joseph, 7620 S. Broadway.
Hardy, Wm. F., 2302 S. Jefferson Ave.
Harmann, Martin F., 3441 N. 9th St.
Harnisch, Henry J., 2407 S. 18th St.
Harral, Walter E., 6201 Etzel Ave.
Harrell, H. Jackson, 4217 Olive St.
Harris, Downey L., 5001 Morgan St.
Harscher, Andrew, 3559 Marine Ave.
Hartmann, Jacob A., 1228 S. Broadway.
Hartwig, Otto A., 219 N. 14th St.
Hauck, E. F., 1638 S. Jefferson Ave.
Hauck, Louis, 3555A Arsenal St.
Hawley, Nelson J., 3864 Cleveland Ave.
Hawley, Thomas S., 3065 Easton Ave.
Hempelmann, Louis H., 626 Metropolitan Bldg.
Henckler, Emil H., 3500 N. 14th St.
Henderson, Frank L., Humboldt Bldg.
Henke, August F., 2210 Howard St.
Hennerich, Jos. P., 2919 S. Broadway.
Henske, Andrew A., 1504 St. Louis Ave.
Henske, A. C., 2435A N. Vandeventer Ave.
Herchenroeder, L. C., 2904 Park Ave.
Hermann, Henry W., 3654 Delmar Ave.
Heuer, Philip J., Humboldt Bldg.
Heyer, Chas., 910 N. 10th St.
Hill, Roland, 4605 Delmar Ave.
Hinchey, Frank, Humboldt Bldg.
Hirschl, Wm. T., 2306 St. Louis Ave.
Hochdoerfer, D. F., 3410 California Ave.
Hoeffer, John P., 2304 S. Broadway.

Hoffmann, Philip, 3337 Washington Ave.
Hoge, M. W., 601 Metropolitan Bldg.
Hogeboom, Roche W., Frisco Hospital.
Holman, Richard S., 3951 Delmar Ave.
Holt, Elmer E., 1532 Franklin Ave.
Holtgrewe, F. W., 1601 Blair Ave.
Homan, George, 323 Odd Fellows Bldg.
Hopkins, Milton J., 3402 Pine St.
Hopkins, Ross, 1055 Hamilton Ave.
Hopkins, Thomas A., 319 Century Bldg.
Houwink, Joseph J., Humboldt Bldg.
Howard, O. L., 4213 Natural Bridge Rd.
Huber, Julius B., 2752 Chippewa St.
Huelsmann, Leo C., 2504 N. 14th St.
Hughes, Harry S., 1234 Hodiamont Ave.
Humphrey, J. Harrison, 212 Ozark Bldg.
Hypes, Benjamin M., 2005 Victor St.
Ilg, Theodore, 3029 S. Grand Ave.
Iralson, Abraham, 6200 Columbia Ave.
Jacobs, Max W., 3000 Olive St.
Jacobson, Henry, 301 Mo. Trust Bldg.
James, John A. J., 1006 Carleton Bldg.
Jennings, J. Ellis, 508 Carleton Bldg.
Jennings, M. D., 4101 Washington Ave.
Johnson, E. Horace, 2433 N. Grand Ave.
Johnson, Frank P., 3744 Finney Ave.
Johnson, Harry McC., Linmar Bldg.
Jonas, Ernst, 465 N. Taylor Ave.
Jones, M. D., 4068 Washington Ave.
Jungk, Carl W., 2249 S. Jefferson Ave.
Kane, R. Emmet, Humboldt Bldg.
Keber, John B., 3832 W. Pine St.
Keehn, Gustav A., 2702 N. Grand Ave.
Kennedy, Andrew F., 416 Mermod-Jaccard Bldg.
Kennedy, Walter U., 1121 Cass Ave.
Kern, B. C., 5800 Arsenal St.
Kern, John H., 3916 N. Grand Ave.
Kessler, E. H., 3446 Shenandoah Ave.
Kieffer, Alonzo R., 4268 W. Belle Pl.
Kieffer, V. B., 518 Metropolitan Bldg.
Kier, William F., 3609 Lindell Blvd.
Kimball, A. C., Grand & Franklin Aves.
Kirchner, Walter C. G., City Hospital.
Klenk, Chas. L., 2105 S. Broadway.
Klie, Constantine M. T., 2429 Wren Ave.
Klie, G. H. Charles, 5100 N. Broadway.
Klinefelter, M. L., 704 N. Taylor Ave.
Klokke, W. Emil, 1316 Mississippi Ave.
Koenig, George W., 740 S. 4th St.
Koetter, Albert F., 1023 N. Grand Ave.
Kolbenheyer, Fred., 2006 Lafayette Ave.
Kollme, Otto, 2354 Park Ave.
Koontz, Carl J., 793 Aubert Ave.
Krebs, Franz J. V., 1906 St. Louis Ave.
Krebs, George A., 2709 S. 11th St.
Krehning, Wm. G., 4041A St. Louis Ave.
Kroeger, G. B., 3622 Garfield Ave.
Krug, Frederick H., 2506 N. 15th St.
Kuhlmann, F. C., 2135 St. Louis Ave.
Kuhn, Daniel, 1746 Chouteau Ave.
Kurtzeborn, E. E., 5005A Delmar Ave.
Lare, Harry S. P., 4644 Morgan St.
Larew, John T., Olivia Bldg.
Lawrence, Wm. S., 1913 N. Grand Ave.
Leavy, John A., 4340 Morgan St.
Leggat, Abraham C., Chemical Bldg.
Leighton, Wm. E., 346 N. Boyle Ave.
Lemen, Joseph R., Vanol Bldg.
Levy, Aaron, 4500 Olive St.
Lewis, Bransford, 1050 Century Bldg.
Lightner, C. R., 617 Metropolitan Bldg.
Link, Jos. J., 211 Metropolitan Bldg.
Lipsitz, S. T., City Hospital.
Loeb, Hanau W., Humboldt Bldg.
Loeb, Virgil, Humboldt Bldg.
Loewenstein, H. M., 2615 N. Taylor Ave.
Loftus, Wm. V., 4911 Page Ave.
Long, Jos. M., 513 N. Sarah St.
Luedde, Wm. H., 310 Metropolitan Bldg.
Luhn, Walter D., 2839A Cherokee St.
Lund, Herluf G., 1050 Century Bldg.
Luton, Lionel S., 1023 N. Grand Ave.
Lutz, Frank J., 1630 S. Grand Ave.
Lyman, Harry W., 802 Carleton Bldg.
Lyon, George E., 732 Planters Hotel.
Lyon, Hartwell N., Humboldt Bldg.
McAmis, L. Clifford, Humboldt Bldg.
McBratney, E. W., 7619 S. Broadway.
McCandless, Wm. A., 5026 Washington Ave.
McConnell, Guthrie, 4421 Berlin Ave.
McGann, Peter J., 607 S. Broadway.
McLean, Mary H., 4339 Delmar Ave.
Marchildon, John W., Laclede & Vandeventer Aves.
Mardorf, Wm. C., 3634 Shenandoah Ave.
Marks, Heine, 2930 Morgan St.
Marquardt, A. V., 522 Century Bldg.
Martin, Chas. P., 4111 N. Grand Ave.
Martin, Tillie A., 426 Metropolitan Bldg.
Marx, Ella, 4269 Delmar Ave.
Max, Clarence O. C., 3862A Olive St.
May, Albert, 1803 Morgan St.
Mayes, Joseph F., 1801A Olive St.
Meinhard, Joseph, 921 Chouteau Ave.
Meisenbach, A. H., 229 S. Broadway.
Meisenbach, A. Edward, 2343 Olive St.
Meng, Edwin R., 728 N. Taylor Ave.
Menkhaus, John B., 4607 Easton Ave.
Meyer, Alfred H., 4624 Virginia Ave.
Meyer, Harry H., 1823 N. Taylor Ave.
Millar, Reginald C. M., 4344 Easton Ave.
Miller, H. Edward, 2257 Missouri Ave.
Miller, John J., 4439 Morgan St.
Miller, Robert F., 318 Frisco Bldg.
Miller, W. Jackson, 3014 Park Ave.
Moeller, Carl E., 1419 S. 7th St.
Mook, Wm. H., Humboldt Bldg.
Moore, B. W., 3634 Washington Ave.
Moore, Harry M., Linmar Bldg.
Moore, William G., 86 Vandeventer Pl.
Morfit, John C., Humboldt Bldg.
Morrell, M. Pinckney, 3693 Olive St.
Morris, Chris. C., 2945 Franklin Ave.
Morse, Frank L., 1100 Madison St.
Mudd, Harvey G., Humboldt Bldg.
Mueller, Ernst H., 3548 Arsenal St.
Mueller, Geo. L., 1125 Madison St.
Muetze, Henry, 3201 Shenandoah Ave.
Munsch, Augustin P., 4637 Easton Ave.
Munson, Chas. L., 1145 S. 7th St.
Murphy, John C., 4263 Morgan St.
Murphy, R. Brent, 6120 Victoria St.
Myer, Jesse S., Linmar Bldg.
Myerdick, A. H. 1704 N. Grand Ave.
Nash, W. H., 405 Commercial Bldg.
Neilson, Chas. H., Med. Dept., St. Louis University.
Nelson, Edwin M., 965 Hamilton Ave.
Neuhoff, Fritz, 1318 Chouteau Ave.
Newman, Louis E., Humboldt Bldg.
Newman, Samuel E., 4323 Laclede Ave.
Nicholson, Clarence M., 4500 Olive St.
Niebruegge, H. T., 2003 Salisbury St.
Nietert, Herman L., 522 Century Bldg.
Norris, Edwin J., 4223 Russell Ave.
North, Emmett P., 3920 Russell Ave.
Oatman, Louis J., 4217 Olive St.
Oehler, Emanuel F., 1432 Penrose St.
Ogle, Oliver L., 2625 St. Louis Ave.
O'Keefe, James J., 1011 N. Leffingwell Ave.
O'Reilly, Archer, 423 Metropolitan Bldg.
Orth, Carl, 1437 Penrose St.
Outten, Warren B., Mo. Pac. Hospital.
Owen, William C., 3846 Folsom Ave.
Padberg, Louis R., 3612A Arsenal St.
Paine, George F., Carleton Bldg.
Parce, Alexander D., Frisco Hospital.
Park, George M., 5352 Page Ave.
Parker, Chas. W., 3502 N. Jefferson Ave.
Parker, Frederick P., 1423 Euclid Ave.
Parrish, George, 619 N. Kingshighway.
Pfingsten, C. F., 2230 College Ave.
Pierce, Harry M., 4046 N. Grand Ave.
Pitzman, Marsh, City Hospital.
Poignee, Frank P., 917 Hickory St.
Pollman, Ludwig P., 2002 St. Louis Ave.
Pope, Chas. H., 1557 S. Jefferson Ave.
Porter, William, 3886 Washington Ave.
Post, M. Hayward, 5371 Waterman Ave.
Potts, J. D., 518 Metropolitan Bldg.
Powell, Ignatius W., N. E. Cor. Grand & Easton Aves.
Prinz, Herman, 602 Century Bldg.
Raithel, G. Herman, 1446 Hogan St.
Rassieur, Louis, 315 Metropolitan Bldg.
Ravold, Amand, 1208 Chemical Bldg.
Reber, Robert L., 1837 S. 11th St.
Reder, Francis L., 4629 Cook Ave.
Reed, Elizabeth B., Lister Bldg.
Rehfelt, Chas. S., 2255 S. Jefferson Ave.
Reim, W. Hugo, 3904 Folsom St.
Remme, Charles T., 400 S. 14th St.
Reynolds, M. P., 5805A Easton Ave.
Rice, D. Frank, 5145 Cabanne Ave.
Riesmeyer, L. T., 2838 Lafayette Ave.
Riley, Cassius M., 523 Pendleton Ave.

Riley, Ralph D., 4641 Washington Ave.
Ring, Frank R., 619 Chemical Bldg.
Robertson, William M., Humboldt Bldg.
Rohlfing, Charles G., 1721 Wash St.
Rohlfing, H. A. L., 2602 Laclede Ave.
Rohlfing, Louis C., 3521 Dodier St.
Rothstein, Hugo M., 3309 S. 13th St.
Rotter, Charles F., 1910 Arsenal St.
Ruddell, Geo. W., 926 Academy Ave.
Rush, William H., 3540 Washington Ave.
Sahlender, Otto L., 321 N. Grand Ave.
Salter, John C., 3634 Washington Ave.
Sauer, William E., Humboldt Bldg.
Saunders, E. W., 3003 Lafayette Ave.
Saxl, Ernest, 212 Metropolitan Bldg.
Schaub, Charles W., 2302 Salisbury St.
Schery, Charles W., 917 Allen Ave.
Schisler, E. J., Jefferson & Russell Aves.
Schleiffarth, Chas. W., 3830 Juniata St.
Schleiffarth, Edgar L., 8 S. Broadway.
Schlossstein, A. G., 3153 Longfellow Ave.
Schlueter, Robt. E., 310 Metropolitan Bldg.
Schmallhorst, D. E., 8212 N. Broadway.
Scholz, Paul C., 3201 Franklin Ave.
Scholz, Philip, 3803 N. 14th St.
Scholz, Roy P., 1110 Ferry St.
Schuchat, W. Louis, 2200 Chouteau Ave.
Schulz, Edward, 1716 S. 7th St.
Schwab, Sidney I., Humboldt Bldg.
Schwarz, Henry, 440 N. Newstead Ave.
Schwarze, August, 2921 S. Jefferson Ave.
Scott, James M., 3313 Morgan St.
Seelig, Major G., Humboldt Bldg.
Semple, Nathaniel M., Humboldt Bldg.
Shankland, J. Wilbert, City Hospital.
Shanklin, Benjamin, 2734 Chouteau Ave.
Shapleigh, John B., Humboldt Bldg.
Sharpe, Norvelle W., 3520 Lucas Ave.
Shattinger, Chas., 2924 S. Grand Ave.
Sheahan, Edwin L., 3637 Finney Ave.
Shields, William B., Linmar Bldg.
Shoemaker, J. F., 1006 Carleton Bldg.
Shoemaker, Wm. A., 1006 Carleton Bldg.
Shutt, Cleveland H., City Hospital.
Sieving, Henry J. C., 1125 St. Louis Ave.
Simon, Frederick C., 1835 Cass Ave.
Simon, John H., 4062 Manchester Ave.
Singer, Jacob J., 212 Ozark Bldg.
Skinner, Caroline B., Grand & Olive St.
Sluder, Greenfield, 3542 Washington Ave.
Smith, Carroll, Humboldt Bldg.
Smith, Elsworth, Jr., Humboldt Bldg.
Smith, James A., Mo. Pac. Hospital.
Smith, John Campbell, Humboldt Bldg.
Smith, Seth P., 2331 Eugenia St.
Soper, H. W., 626 Metropolitan Bldg.
Spain, Kate C., 802 Carleton Bldg.
Spencer, H. N., 2723 Washington Ave.
Spencer, Selden, 2723 Washington Ave.
Spiegelhalter, Joseph, 2166 Lafayette Ave.
Spinzig, Felix, 937 Park Ave.
Stauffer, William H., Humboldt Bldg.
Steedman, Isaiah G. W., 4200 Washington Ave.
Steer, Justin, 3126 Washington Ave.
Steiner, Albert S., 1507 Destrehan St.
Stewart, Floyd, 1524 Chemical Bldg.
Stewart, James, 4847 Page Ave.
Stewart, John, 4909 St. Louis Ave.
Stocking, Lyman C., 1304 Academy Ave.
Stockwell, Benj. E., 2345 S. Broadway.
Streutker, C. E. F., 3828 S. Broadway.
Summa, Henry H., 5703 Florissant Ave.
Summa, Hugo, 411 Metropolitan Bldg.
Swahlen, P. H., 415 Metropolitan Bldg.
Talbott, Hudson, 426 Metropolitan Bldg.
Taussig, A. E., 3519 Washington Ave.
Taussig, F. J., 727 Metropolitan Bldg.
Thierry, C. W., 501 Metropolitan Bldg.
Thompson, Ralph L., 1402 S. Grand Ave.
Thumser, Lorenz, 1808 Victor St.
Tiedemann, E. F., 3635 Cleveland Ave.
Tooker, Chas. W., 409 N. Grand Ave.
Tuholske, Herman, 465 N. Taylor Ave.
Tuholske, Moritz C., 4130 Easton Ave.
Tupper, Paul Y., Linmar Bldg.
Tuttle, Geo. M., 4519 Washington Ave.
Ude, Waldemar, 3546 Gravois Ave.
Valle, Jules F., 4955 Maryland Ave.
Vandover, Samuel T., 903 Morrison Ave.
Van Hoefen, Samuel, 8408 Hall's Ferry Rd.
Van Hoefen, S. A., 8313 Hall's Ferry Rd.
Vasterling, Paul F., Mo. Pac. Hospital.
Vaughan, John W., Euclid & Washington Aves.
Vledt, Edward J., 6901 S. Broadway.
Vierling, Otto, 4555 Adkins Ave.
Vinyard, Paul, 3901 Park Ave.
Vitt, Rudolph S., 3924 S. Broadway.
Vogler, Alfred T., 1523 Penrose St.
Vogt, Gustav W., 4977 Lotus Ave.
Vogt, Wm. H., 732 Metropolitan Bldg.
Von der Au, Otto L., 2306 S. 13th St.
Vosburg, Chas. A., 4149 Lindell Blvd.
Wagers, Arthur J., 3773 W. Pine St.
Walker, Clarence E., 6422 Virginia Ave.
Ward, Edgar P., 2831 Shenandoah Ave.
Warfield, L. M., 3806 Washington Ave.
Watson, Chas. M., St. John's Hospital.
Webb, William, 5575 Delmar Ave.
Weinsberg, Chas. H., 1531 S. 11th St.
Weinsberg, Julius H., 2015 Russell Ave.
Weiss, William, Mo. Pac. Hospital.
Welterer, Herman L., 2728 N. 11th St.
Wesseler, F. W., 2819 S. 13th St.
Westbrook, George W., 415 S. 23rd St.
Westerman, C. M., 512 Mo. Trust Bldg.
Whelpley, Henry M., 2342 Albion Place.
White, Chas. A., 420 Holland Bldg.
Wichmann, A. G., 1624 S. Jefferson Ave.
Wichmann, H. L., 3229 S. Jefferson Ave.
Wiener, Meyer, Carleton Bldg.
Wilkes, Benj. A., Linmar Bldg.
Williams, Abram D., Hotel Deckard, Bedford, Ind.
Williamson, Llewellyn P., 611 Metropolitan Bldg.
Wilson, Allen, 1514 Wagoner.
Wilson, Alvah M., Humboldt Bldg.
Wilson, Charles A., 635 Century Bldg.
Wilson, Robert E., 817 Third National Bank Bldg.
Winn, William B., 2707A Lafayette Ave.
Winter, William O., 3630 S. Broadway.
Wobus, Reinhard E., 2022 Salisbury.
Wolfner, Henry L., 500 Carleton Bldg.
Wood, William E., 454 Century Bldg.
Woodruff, F. E., 2925 Washington Ave.
Woolsey, Ross A., Frisco Hospital.
Wyche, Charles, Humboldt Bldg.
Yost, Walter B., 1119 Union Blvd.
Young, Anthony O., 4229 Olive St.
Zahorsky, John, 1460 S. Grand Ave.

## SCHUYLER COUNTY.

Bridges, J. B., Downing, Mo.
Gerwig, H. E., Downing, Mo.
Mitchell, E. L., Lancaster, Mo.
Mitchell, W. F., Lancaster, Mo.

## SCOTLAND COUNTY.

Alexander, W. E., Memphis, Mo.
Baker, P. M., Arbela, Mo.
Bondurant, W. E. H., Memphis, Mo.
Davis, A. L., Arbela, Mo.
Foster, F. G., Memphis, Mo.
Maynard, G. K., Hitt, Mo.
Parrish, E. E., Memphis, Mo.
Pile, O. F., Memphis, Mo.
Platter, A. E., Memphis, Mo.
Shacklett, J. A., Rutledge, Mo.

## SCOTT COUNTY.

Atkisson, J. A., Morehouse, Mo.
Blockledge, H. T., Commerce, Mo.
Cannon, G. S., Fornfelt, Mo.
Cline, J. A., Vanduser, Mo.
Harris, W. E., Oran, Mo.
Haw, U. P., Benton, Mo.
Hutton, W. S., Fornfelt, Mo.
Lucas, H. R., Chaffee, Mo.
McCabe, R. S., Chaffee, Mo.
Mayfield, L. S., Graysboro, Mo.
Milem, J. A., Sikeston, Mo.
Ogilvie, Fred, Blodgett, Mo.
Rodenmeyer, Henry, Kelso, Mo.
Sparks, R. A., Blodgett, Mo.

Tate, P. S., Fornfelt, Mo.
Tomlinson, T. E., Morley, Mo.
Wade, S. J., Benton, Mo.
Wescoat, W. H., Oran, Mo.

SHELBY COUNTY.

Carson, Wm., Shelbyville, Mo.
Chapman, Chas., Shelbina, Mo.
Dallas, L. W., Hunnewell, Mo.
Daniel, J. R., Clarence, Mo.
Dodson, D. A., Hunnewell, Mo.
Owen, W. W., Shelbina, Mo.
Pollard, H. M., Shelbina, Mo.
Reed, N. M., Clarence, Mo.
Singleton, D. E., Shelbina, Mo.
Smith, J. D., Shelbina, Mo.
Vaughn, H. C., Shelbina, Mo.
White, A. T., Lakenan, Mo.
Wood, A. G., Lentner, Mo.
Wood, A. M., Lentner, Mo.

STODDARD COUNTY.

Allen, T. C., Bernie, Mo.
Ashley, John, Bloomfield, Mo.
Dieckman, W. C., Dexter, Mo.
Evans, S. M., Bloomfield, Mo.
Kerr, W. F., Dudley, Mo.
Moore, Edward, Bloomfield, Mo.
Wingo, T. B., Fulton, Mo.

SULLIVAN COUNTY.

Garner, R. L., Pollack, Mo.
Herington, Warner, Green City, Mo.
Holladay, S. J., Pollack, Mo.
Montgomery, J. S., Milan, Mo.
Poole, A. R., Milan, Mo.
Porter, E. S., Milan, Mo.
Roberts, J. C., Boynton, Mo.
Shriver, C. F., Harris, Mo.
Widner, A., Newtown, Mo.
Wilson, C. S., Green City, Mo.
Witter, W. L. M., Milan, Mo.

TANEY COUNTY.

Balwin, F. V., Forsyth, Mo.
Burdett, Charles W., Branson, Mo.
Compton, J. P., Branson, Mo.
Houston, O. C., Forsyth, Mo.
Humphreys, T. H., Kissee Mills, Mo.
Irwin, R. M., Gretna, Mo.
McIntyre, Elizabeth, Branson, Mo.
Mitchell, Guy B., Forsyth, Mo.
Nicholson, J. O., Protem, Mo.

VERNON COUNTY.

Adams, W. T., Richards, Mo.
Altham, A. G., Metz, Mo.
Amerman, I. W., Nevada, Mo.
Bohannon, W. T., Nevada, Mo.
Buchanan, J. Robt., Nevada, Mo.
Callaway, L. H., Nevada, Mo.
Chambers, James C., Schell City, Mo.
Churchill, E. R., Nevada, Mo.
Craig, T. B. M., Nevada, Mo.
Colson, J. R., Schell City, Mo.
DeVilbiss, E. F., Nevada, Mo.
Dulin, E. A., Nevada, Mo.
Farrington, O. P., Moundville, Mo.
Jarvis, H. C., Schell City, Mo.
McLemore, T., Nevada, Mo.
Mackey, A. H., Gorin, Mo.
Manahan, J. H., Bronaugh, Mo.
Mead, S. T., Nevada, Mo.
Popplewell, W. H., Sheldon, Mo.
Primm, W. B., Deerfield, Mo.
Robinson, G. Wilse, Nevada, Mo.
Robinson, J. F., Nevada, Mo.
Royston, W. P., Harwood, Mo.
Todd, T. B., Richards, Mo.
Williams, V. O., Nevada, Mo.
Willson, G. C., Nevada, Mo.
Yater, J. M., Nevada, Mo.

WAYNE COUNTY.

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Gilmer, J. E., Piedmont, Mo.
Hale, J. W., Greenville, Mo.
Loney, G. W., Piedmont, Mo.
Owens, R. J., Mill Spring, Mo.
Sebastain, J. P., Williamsville, Mo.

WEBSTER COUNTY.

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Bailey, E. M., Elkland, Mo.
Beatie, W. R., Marshfield, Mo.
Bollinger, W. H., Seymour, Mo.
Bruton, T. S., Seymour, Mo.
Cantwell, B. T., Rogersville, Mo.
Florence, T. S., Marshfield, Mo.
Highfill, M., Marshfield, Mo.
James, E. F., Marshfield, Mo.
McHaffie, C. H., Rogersville, Mo.
Mott, J. R., Northview, Mo.
Rabenan, W. J., Fordland, Mo.
Somers, W. R., Niangua, Mo.
Trimble, Eli, Seymour, Mo.
Williams, D. A., Niangua, Mo.

WORTH COUNTY.

Dove, P. O., Allendale, Mo.
McKinley, W. E., State Hospital, St. Joseph, Mo.
Nesbitt, E. P., Sheridan, Mo.
Phipps, J. K., Grant City, Mo.
Robertson, W. A., Allendale, Mo.

# BOOK REVIEWS

LIFE OF NATHAN SMITH DAVIS, M. D., "FATHER OF THE AMERICAN MEDICAL ASSOCIATION." By Isaac N. Danforth, A. M., M. D., Chicago. Published by Cleveland Press, Chicago, Ill. English silk binding, $2.00.

Dr. Nathan Smith Davis was probably one of the strongest and most important personalities in the ranks of American medicine. He did more in uplifting the profession as a whole than any other man of his time. A careful study of the charming narrative of Davis' life, as told in this volume, might well initiate every student into the meaning and possibilities of a medical career, and since we approach commencement time we recommend this book as a useful gift to graduating students and professional friends.

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DISEASES OF THE GENITO-URINARY ORGANS AND THE KIDNEY. By Robert H. Greene, M. D., Professor of Genito-Urinary Surgery at the Fordham University, New York; and Harlow Brooks, M. D., Assistant Professor of Pathology, University and Bellevue Hospital Medical School. Octavo of 536 pages, profusely illustrated. Philadelphia and London. W. B. Saunders Company, 1907. Cloth, $5.00 net; half morocco, $6.50 net.

This new work covers completely the subject of genito-urinary surgery, presenting both the medical and surgical sides. It has been designed as a work of quick reference, and is written in a clear, condensed style. The text is profusely illustrated with original line drawings, showing the various steps of the operations described.

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TREATMENT OF INTERNAL DISEASES. By Dr. Norbert Ortner of the University of Vienna. Edited by Nathaniel Bowditch Potter, Columbia University, New York. Translated by F. H. Bartlett, M. D., from the fourth German edition. Octavo 658 pages. Cloth, $5.00 net. J. B. Lippincott Co., Philadelphia, 1908.

The scope of this book is treatment, not prophylaxis, only so much of the pathologic physiology of the diseases being discussed as bears upon rational treatment. The importance of mechanical, dietetic, climatic and all extra-medicinal methods is shown, which today in therapeutics hold a place at least equal in value to the prescribing of drugs. Thus the volume contains descriptions of all well known climatic resorts, the chemical analysis of widely used mineral waters, always with a careful consideration of the indications for their employment in special conditions.

The editor has further improved the value of this excellent work by adapting all references to climatology, hygiene, diet, etc., to the special needs of the American practitioner, e. g., by adding a list of American water resorts, or changing prescriptions to conform with the American pharmacopeia.

THE MELLIN'S FOOD METHOD OF PERCENTAGE FEEDING. Published by Mellin's Food Company, Boston.

This book, recently from the press of the Mellin's Food Company, contains much important information not to be found in general books of reference, and shows much painstaking experiment and research in its preparation. The directions for preparing creams, top-milks, bottom-milks, whey, etc., cover the subject very thoroughly; these alone should be of great value to physicians. The tables of formulæ for feeding mixtures for infants, include almost every desired combination, through a wide range of variations. The object of the book is to save the busy practitioner the computations necessary for the determination of the percentages of nutritive constituents of any selected formula and to enable him easily to change the ingredients in said formula to any proportions desired.

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A MANUAL OF THE PRACTICE OF MEDICINE. By A. A. Stevens, A. M., M. D., Professor of Therapeutics and Clinical Medicine in the Woman's Medical College of Pennsylvania. Eighth Edition, Revised. 12mo of 558 pages, illustrated. Philadelphia and London. W. B. Saunders Company, 1907. Flexible leather, $2.50 net.

This new, eighth edition of Dr. Stevens' Manual maintains the high standard of former editions. The book needs no introduction to the profession. The hope that "the work may still be considered as offering a concise, but clear and accurate representation of the essential facts of the practice of medicine," is most certainly realized. There is no book which meets so well the needs of the student, or offers the practitioner so rapid and safe a review, as does this Manual. How well have the essential facts of practice been condensed, and at the same time made assimilable, in this volume of 558 pages! The paper, the type, the illustrations, the binding, the size, are all that could be desired.

D. C. G.

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THE INTERNAL SECRETIONS AND THE PRINCIPLES OF MEDICINE. By Charles E. De M. Sajous, M. D., Fellow of the College of Physicians, of Philadelphia; Member of the American Philosophical Society, the Academy of Natural Sciences, of Philadelphia, etc. Volume Second. With twenty-five illustrations. F. A. Davis Company, Publishers, Philadelphia, Penn.

Sajous' second volume on Internal Secretions, a most comprehensive and voluminous work, has been out now several months. It covers, from the author's standpoint, biology, pharmocodynamics, pathogenesis and applied therapeutics. From the bibliography and the vast amount of statistics and data presented, the reader is impressed with the extensive research done by the author in the literature of the world.

The subject of the internal secretions and ductless glands is a most important and fascinating one, and at present is occupying the time and thought of investigators and physiologists of both continents. It is recognized by the most careful investigators that both disease of and experiment upon the ductless glands prove an important part played by the internal secretions in body metabolism.

It is very evident, however, that Sajous' theories and positively stated conclusions in regard to metabolism and functional control, by the adrenals and pituitary gland, cannot be accepted as final, nor, in most instances, as probable.

If this volume represented the results of personal experimentation, investigation and observation, it would have much more weight. But the methods adopted do not appeal to the practical worker, nor to the scientific man. Hence, in the reviewer's opinion, though the volume contains much of value and suggestion, and some theories which have a basis of fact, it is not a treatise which can safely be placed in the hands of the general practitioner or the average teacher of physiology as a text book to follow. S. P. C.

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INTERNATIONAL CLINICS. Vol. IV, 17th Series, 1907. J. B. Lippincott Co., Publishers, Philadelphia.

The contents of this volume are so rich in meat that a short review becomes almost impossible. Perhaps the most striking paper is that of Dr. P. Emile Weil (Paris), who finds that injections of fresh serum taken from rabbits or horses act as a prophylactic against hemorrhage, even in congenital hemophilia. If Weil's observations are correct they are of very extraordinary importance. McPhedran (Toronto) contributes a scholarly article on the early diagnosis of cancer of the stomach. LeConte gives a critical report of a surgical rarity, a case of strangulated, undescended, sarcomatous testicle. Only two similar cases have been recorded. Intraspinous injections of magnesium sulphate are credited, by J. H. Norman, with saving one patient out of a series of four suffering from tetaus while the sufferings of those who died were eased by the treatment. Pancoat's Radiographic Study of Gastroptosis is very thoroughly illustrated and deserves attention. Calmette presents his views on the ophthalmo-reaction to tuberculin which bears his name.

J. F. B.

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